

10/513699

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptaeal1624

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes
NEWS	3	AUG 18	COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS	4	AUG 24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	5	AUG 24	CA/CAPLUS enhanced with legal status information for U.S. patents
NEWS	6	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	7	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT 21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS	9	OCT 21	Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS	10	NOV 23	Addition of SCAN format to selected STN databases
NEWS	11	NOV 23	Annual Reload of IFI Databases
NEWS	12	DEC 01	FRFULL Content and Search Enhancements
NEWS	13	DEC 01	DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS	14	DEC 02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS	15	DEC 02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS	16	DEC 02	USGENE: Enhanced coverage of bibliographic and sequence information
NEWS	17	DEC 21	New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAPLUS
NEWS	18	JAN 12	Match STN Content and Features to Your Information Needs, Quickly and Conveniently
NEWS	19	JAN 25	Annual Reload of MEDLINE database
NEWS	20	FEB 16	STN Express Maintenance Release, Version 8.4.2, Is Now Available for Download
NEWS	21	FEB 16	Derwent World Patents Index (DWPI) Revises Indexing of Author Abstracts
NEWS	22	FEB 16	New FASTA Display Formats Added to USGENE and PCTGEN
NEWS	23	FEB 16	INPADOCDB and INPAFAMDB Enriched with New Content and Features

<12/04/2007>

Erich Leese

10/513699

NEWS 24 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail  
Addresses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,  
AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN customer  
agreement. This agreement limits use to scientific research. Use  
for software development or design, implementation of commercial  
gateways, or use of CAS and STN data in the building of commercial  
products is prohibited and may result in loss of user privileges  
and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:19:08 ON 08 MAR 2010

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 13:19:27 ON 08 MAR 2010  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2010 HIGHEST RN 1208070-84-1  
DICTIONARY FILE UPDATES: 7 MAR 2010 HIGHEST RN 1208070-84-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

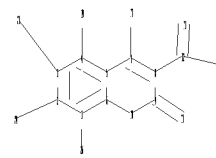
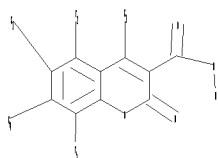
<http://www.cas.org/support/stngen/stndoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10537711final.str

<12/04/2007>

Erich Leese

10/513699



```
chain nodes :
11 12 13 14 15 17 19 21 24 26
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
1-26 2-24 3-21 4-19 7-17 8-12 9-11 12-14 12-13 14-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10
exact/norm bonds :
1-26 2-24 3-21 4-19 5-7 6-10 7-8 7-17 8-9 9-10 9-11 12-14 12-13
exact bonds :
8-12 14-15
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
```

G1:C,H

G2:H,Ak

G3:H,X,Ak,NO2,C

G4:H,OH,Ak,MeO,EtO,n-PrO,i-PrO,n-BuO,i-BuO,s-BuO,t-BuO,C,O

G5:H,Ak,O,NO2

<12/04/2007>

Erich Leese

10/513699

Match level :

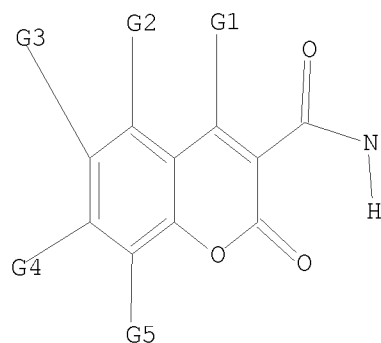
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 19:CLASS 21:CLASS  
24:CLASS 26:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C, H

G2 H, Ak

G3 H, X, Ak, NO2, C

G4 H, OH, Ak, MeO, EtO, n-PrO, i-PrO, n-BuO, i-BuO, s-BuO, t-BuO, C, O

G5 H, Ak, O, NO2

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss

SAMPLE SEARCH INITIATED 13:19:54 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1032 TO ITERATE

100.0% PROCESSED 1032 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 18713 TO 22567

PROJECTED ANSWERS: 10418 TO 13342

L2 50 SEA SSS SAM L1

=> d scan

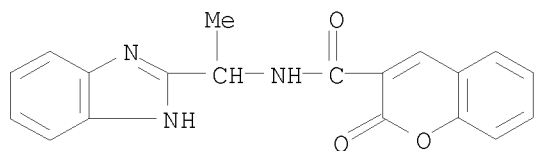
<12/04/2007>

Erich Leese



10/513699

L2 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
IN 2H-1-Benzopyran-3-carboxamide, N-[1-(1H-benzimidazol-2-yl)ethyl]-2-oxo-  
MF C19 H15 N3 O3

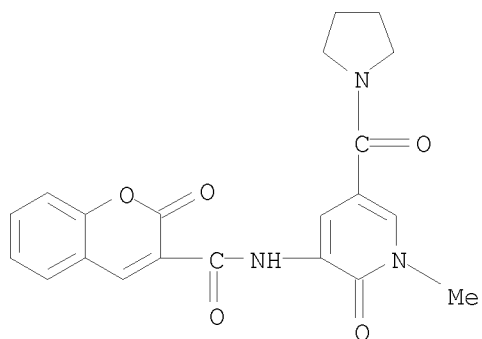


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

10/513699

L2 50 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
IN 2H-1-Benzopyran-3-carboxamide, N-[1,2-dihydro-1-methyl-2-oxo-5-(1-pyrrolidinylcarbonyl)-3-pyridinyl]-2-oxo-  
MF C21 H19 N3 O5



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

10/513699

=> s l1 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
FULL SEARCH INITIATED 13:20:18 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 20990 TO ITERATE

100.0% PROCESSED 20990 ITERATIONS 11711 ANSWERS  
SEARCH TIME: 00.00.01

L3 11711 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	192.03	192.25

FILE 'CAPLUS' ENTERED AT 13:20:30 ON 08 MAR 2010  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 8 Mar 2010 VOL 152 ISS 11  
FILE LAST UPDATED: 7 Mar 2010 (20100307/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3 full

L4 678 L3

=> s l4 and coumarin-amide

28056 COUMARIN  
8763 COUMARINS  
30516 COUMARIN  
(COUMARIN OR COUMARINS)  
147884 AMIDE  
92397 AMIDES

<12/04/2007>

Erich Leese

10/513699

```

      201624 AMIDE
            (AMIDE OR AMIDES)
      17 COUMARIN-AMIDE
            (COUMARIN(W)AMIDE)
L5      4 L4 AND COUMARIN-AMIDE

=> s 15 and xiaoguang
      0 XIAOGUANG
L6      0 L5 AND XIAOGUANG

=> s 15
      28056 COUMARIN
      8763 COUMARINS
      30516 COUMARIN
            (COUMARIN OR COUMARINS)
      147884 AMIDE
      92397 AMIDES
      201624 AMIDE
            (AMIDE OR AMIDES)
      17 COUMARIN-AMIDE
            (COUMARIN(W)AMIDE)
L7      4 L4 AND COUMARIN-AMIDE

=> d ibib abs hitstr tot
THE ESTIMATED COST FOR THIS REQUEST IS 23.24 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

<12/04/2007>

Erich Leese

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:1181257 CAPLUS

DOCUMENT NUMBER: 144:488488

TITLE: Cyclopropanation of N-Substituted  
2-Oxochromene-3-carboxamides and  
3-Oxobenzo[f]chromene-2-carboxamides with  
Bromine-containing Zinc Enolate Prepared from  
 $\alpha,\alpha$ -Dibromopinacolin and Zinc

AUTHOR(S): Shchepin, V. V.; Silaichev, P. S.; Vakhrin, M. I.;  
Russkikh, N. Yu.

CORPORATE SOURCE: Perm State University, Perm, 614990, Russia

SOURCE: Russian Journal of Organic Chemistry (2005), 41(8),  
1219-1221

CODEN: RJOCEQ; ISSN: 1070-4280

PUBLISHER: Pleiades Publishing, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:488488

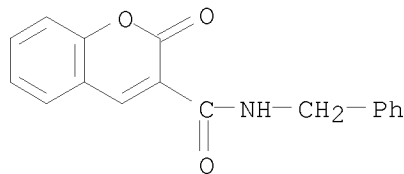
AB Zinc enolate obtained from 1,1-dibromo-3,3-dimethylbutan-2-one reacted  
with N-substituted 2-oxochromene-3-carboxamides and  
3-oxobenzo[f]chromene-2-carboxamides affording  
1-(2,2-dimethyl-propanoyl)-2-oxo-1a,7b-dihydrocyclopropa[c]chromene-1a-  
carboxamides and 1-(2,2-dimethylpropanoyl)-2-oxo-1a,9C-  
dihydrobenzo[f]cyclopropa[c]chromene-1a-carboxamide as single isomers.

IT 1846-90-8 1847-00-3 4021-23-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
(stereoselective cyclopropanation of oxochromene- and  
oxobenzochromenecarboxamides with bromo zinc enolate from  
dibromopinacolin)

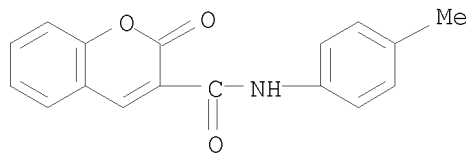
RN 1846-90-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



RN 1847-00-3 CAPLUS

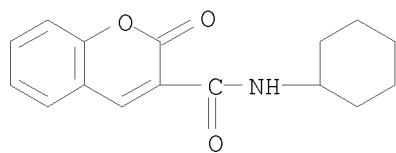
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 4021-23-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-cyclohexyl-2-oxo- (CA INDEX NAME)

10/513699



REFERENCE COUNT:

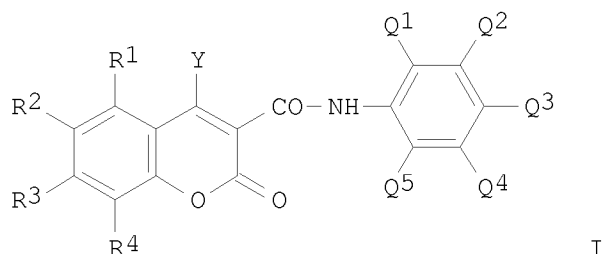
3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:544733 CAPLUS  
 DOCUMENT NUMBER: 133:170290  
 TITLE: Optical recording medium using coumarin-type amides  
 INVENTOR(S): Ogiso, Akira; Tsukahara, Hiroshi; Nishimoto, Taizo;  
 Misawa, Tsutayoshi; Takuma, Keisuke  
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan;  
 Yamamoto Chemicals Inc.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000218940	A	20000808	JP 1999-25249	19990202
PRIORITY APPLN. INFO.:			JP 1999-25249	19990202
OTHER SOURCE(S):	MARPAT 133:170290			

GI



AB The medium involves a substrate, a reflecting layer, and an optical recording layer containing coumarin-type amides I [R1-R4 = H, halogen, (substituted) alkyl, aralkyl, aryl, alkenyl, alkoxy, aralkyloxy, aryloxy, alkenyloxy, alkylthio, aralkylthio, arylthio, alkenylthio, alkylamino, aralkylamino, arylamino, alkenylamino; R2-R4 may form rings; Q1-Q5 = H, halogen, cyano, NO2, (substituted) alkyl, aralkyl, aryl, alkoxy, aralkyloxy, aryloxy, alkenyl, alkenyloxy, alkylthio, aralkylthio, arylthio, alkenylthio, alkylamino, aralkylamino, arylamino, alkenylamino, acyl, alkoxy carbonyl, aralkyloxy carbonyl, aryloxy carbonyl, alkenyloxy carbonyl, alkylaminocarbonyl, aralkylaminocarbonyl, arylaminocarbonyl, alkenylaminocarbonyl, heterocycle, alkylsulfonyl, arylsulfonyl, arylazo; Y = H, halogen, cyano, (substituted) alkoxy carbonyl, aralkyloxy carbonyl, aryloxy carbonyl, alkenyloxy carbonyl, alkylaminocarbonyl, aralkylaminocarbonyl, arylaminocarbonyl, alkenylaminocarbonyl]. The recordable medium is suitable for recording by blue light (400-500 nm) laser.

IT	287920-70-1	287920-72-3	287920-74-5
	287920-76-7	287920-78-9	287920-80-3
	287920-81-4	287920-86-9	287920-87-0
	287920-88-1	287920-95-0	287920-96-1
	287920-97-2	287920-98-3	287920-99-4
	287921-00-0	287921-01-1	287921-02-2

10/513699

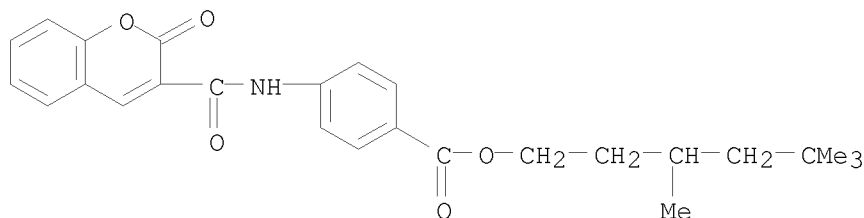
287921-03-3      287921-05-5      287921-06-6

287921-09-9

RL: DEV (Device component use); USES (Uses)  
(recordable optical disk using coumarin amide for  
blue light laser recording)

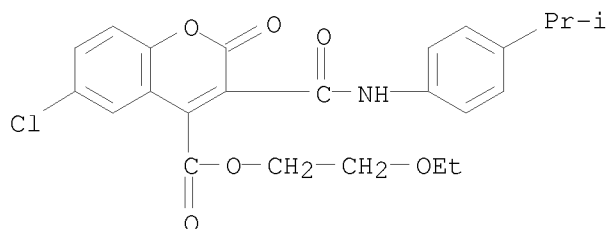
RN 287920-70-1 CAPLUS

CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
3,5,5-trimethylhexyl ester (CA INDEX NAME)



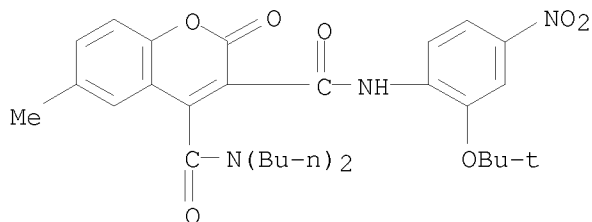
RN 287920-72-3 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid,  
6-chloro-3-[[[4-(1-methylethyl)phenyl]amino]carbonyl]-2-oxo-,  
2-ethoxyethyl ester (CA INDEX NAME)



RN 287920-74-5 CAPLUS

CN 2H-1-Benzopyran-3,4-dicarboxamide,  
N4,N4-dibutyl-N3-[2-(1,1-dimethylethoxy)-4-nitrophenyl]-6-methyl-2-oxo-  
(CA INDEX NAME)

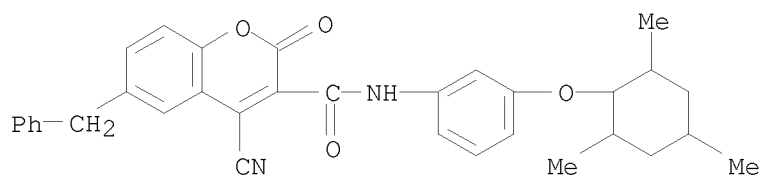


RN 287920-76-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-cyano-2-oxo-6-(phenylmethyl)-N-[3-[(2,4,6-  
trimethylcyclohexyl)oxy]phenyl]- (CA INDEX NAME)

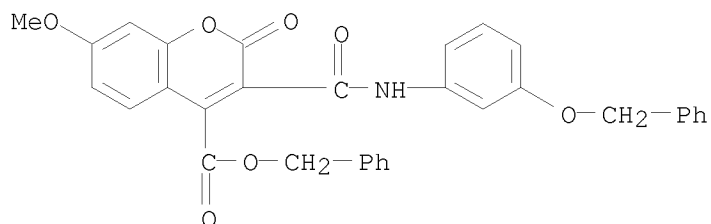


10/513699



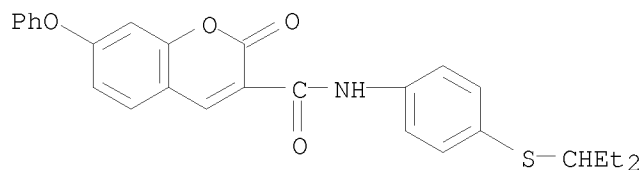
RN 287920-78-9 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid,  
7-methoxy-2-oxo-3-[[[3-(phenylmethoxy)phenyl]amino]carbonyl]-,  
phenylmethyl ester (CA INDEX NAME)



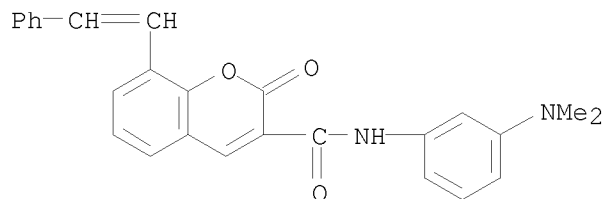
RN 287920-80-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(1-ethylpropyl)thio]phenyl]-2-oxo-7-  
phenoxy- (CA INDEX NAME)



RN 287920-81-4 CAPLUS

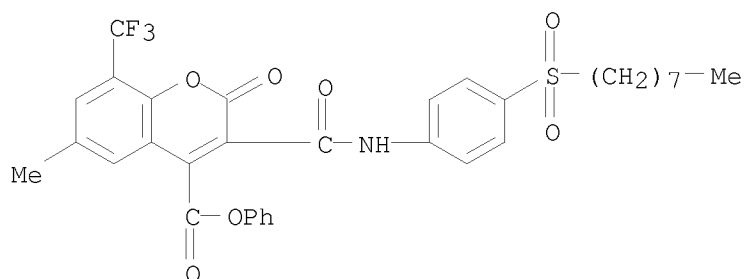
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(dimethylamino)phenyl]-2-oxo-8-(2-  
phenylethenyl)- (CA INDEX NAME)



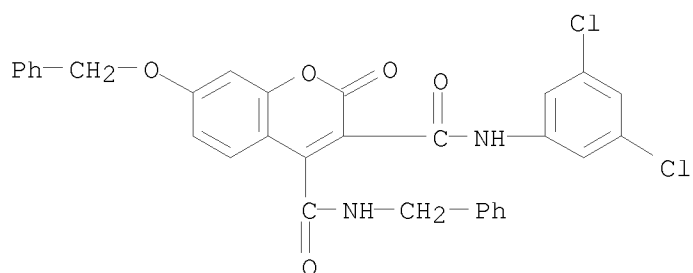
RN 287920-86-9 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid,  
6-methyl-3-[[[4-(octylsulfonyl)phenyl]amino]carbonyl]-2-oxo-8-  
(trifluoromethyl)-, phenyl ester (CA INDEX NAME)

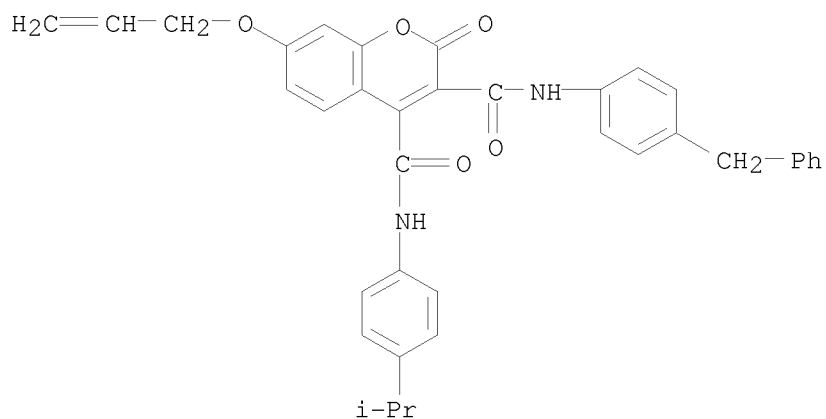
10/513699



RN 287920-87-0 CAPLUS  
CN 2H-1-Benzopyran-3,4-dicarboxamide,  
N3-(3,5-dichlorophenyl)-2-oxo-7-(phenylmethoxy)-N4-(phenylmethyl)- (CA  
INDEX NAME)

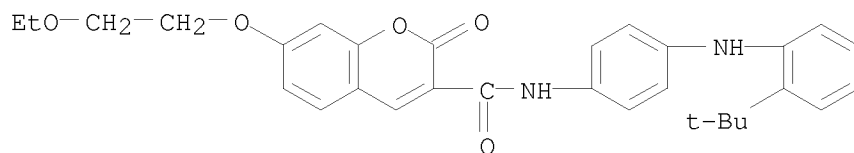


RN 287920-88-1 CAPLUS  
CN 2H-1-Benzopyran-3,4-dicarboxamide,  
N4-[4-(1-methylethyl)phenyl]-2-oxo-N3-[4-(phenylmethyl)phenyl]-7-(2-propen-  
1-yloxy)- (CA INDEX NAME)

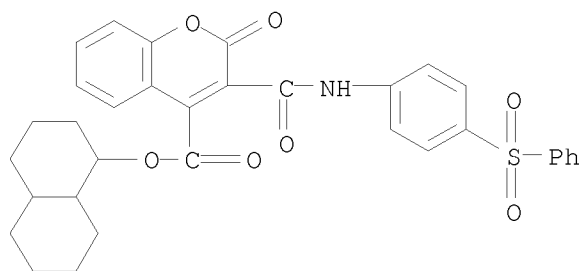


RN 287920-95-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[2-(1,1-  
dimethylethyl)phenyl]amino]phenyl]-7-(2-ethoxyethoxy)-2-oxo- (CA INDEX  
NAME)

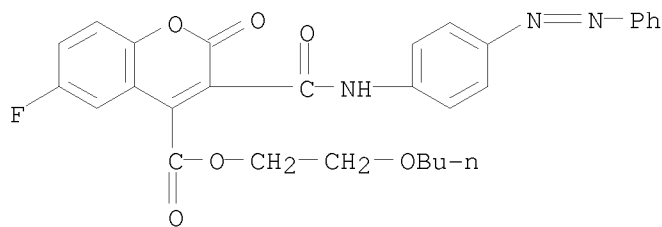
10/513699



RN 287920-96-1 CAPLUS  
CN 2H-1-Benzopyran-4-carboxylic acid,  
2-oxo-3-[[[4-(phenylsulfonyl)phenyl]amino]carbonyl]-,  
decahydro-1-naphthalenyl ester (CA INDEX NAME)

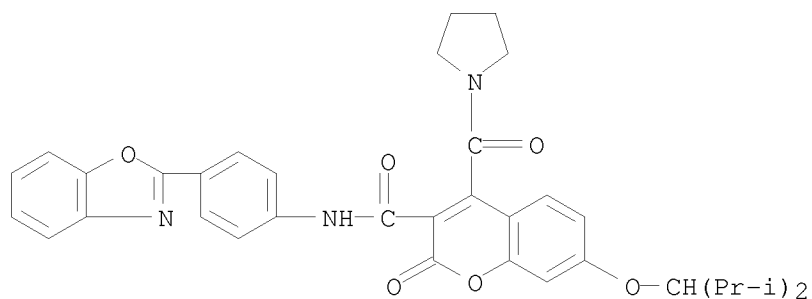


RN 287920-97-2 CAPLUS  
CN 2H-1-Benzopyran-4-carboxylic acid,  
6-fluoro-2-oxo-3-[[[4-(2-phenyldiazenyl)phenyl]amino]carbonyl]-,  
2-butoxyethyl ester (CA INDEX NAME)



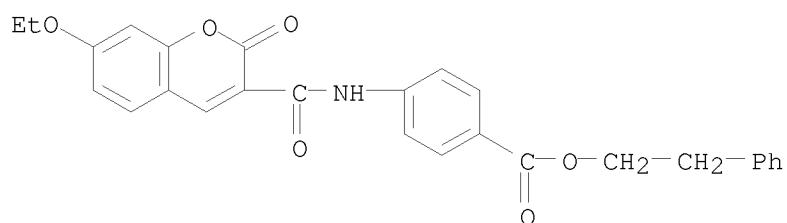
RN 287920-98-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2-benzoxazolyl)phenyl]-7-[2-methyl-1-(1-methylethyl)propoxy]-2-oxo-4-(1-pyrrolidinylcarbonyl)- (CA INDEX NAME)

10/513699



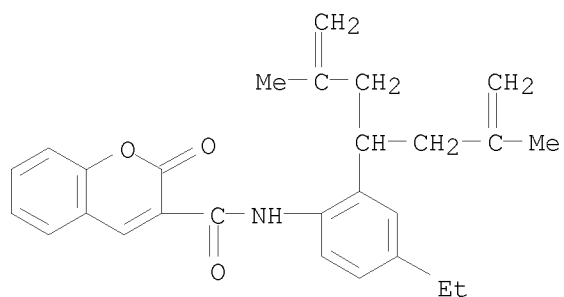
RN 287920-99-4 CAPLUS

CN Benzoic acid, 4-[[ (7-ethoxy-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-, 2-phenylethyl ester (CA INDEX NAME)



RN 287921-00-0 CAPLUS

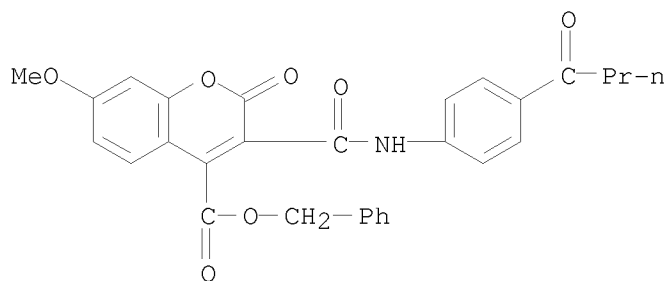
CN 2H-1-Benzopyran-3-carboxamide, N-[4-ethyl-2-[3-methyl-1-(2-methyl-2-propen-1-yl)-3-buten-1-yl]phenyl]-2-oxo- (CA INDEX NAME)



RN 287921-01-1 CAPLUS

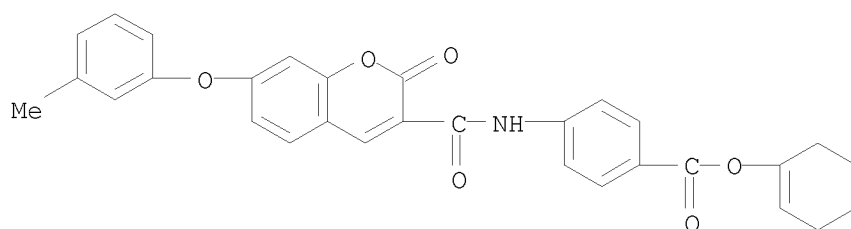
CN 2H-1-Benzopyran-4-carboxylic acid, 7-methoxy-2-oxo-3-[[[4-(1-oxobutyl)phenyl] amino] carbonyl]-, phenylmethyl ester (CA INDEX NAME)

10/513699



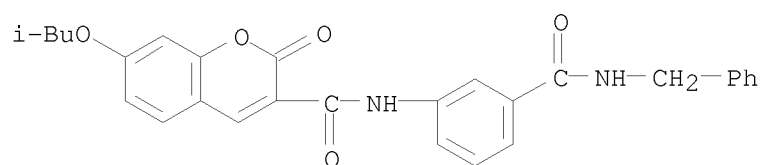
RN 287921-02-2 CAPLUS

CN Benzoic acid, 4-[[[7-(3-methylphenoxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, 1-cyclohexen-1-yl ester (CA INDEX NAME)



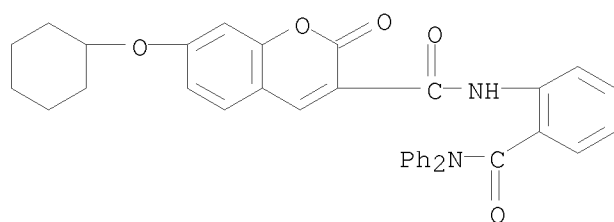
RN 287921-03-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(2-methylpropoxy)-2-oxo-N-[3-[(phenylmethyl)amino]carbonyl]phenyl]- (CA INDEX NAME)



RN 287921-05-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(cyclohexyloxy)-N-[2-[(diphenylamino)carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



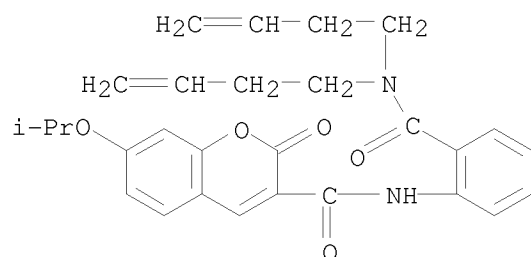
RN 287921-06-6 CAPLUS

<12/04/2007>

Erich Leese

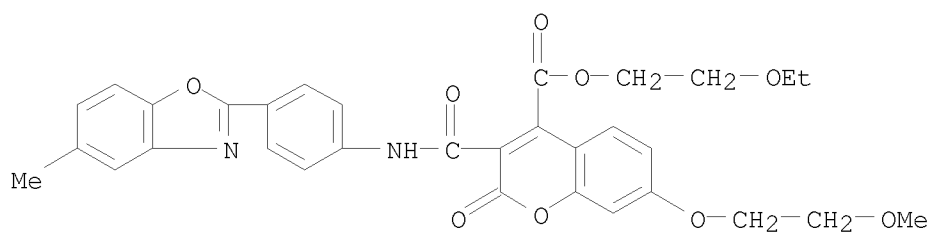
10/513699

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(di-3-buten-1-ylamino)carbonyl]phenyl]-7-(1-methylethoxy)-2-oxo- (CA INDEX NAME)



RN 287921-09-9 CAPLUS

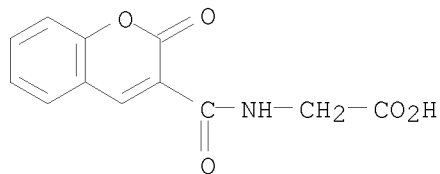
CN 2H-1-Benzopyran-4-carboxylic acid,  
7-(2-methoxyethoxy)-3-[[[4-(5-methyl-2-benzoxazolyl)phenyl]amino]carbonyl]-  
2-oxo-, 2-ethoxyethyl ester (CA INDEX NAME)



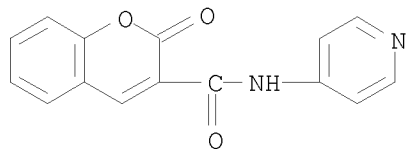
L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1992:166246 CAPLUS  
 DOCUMENT NUMBER: 116:166246  
 ORIGINAL REFERENCE NO.: 116:27883a, 27886a  
 TITLE: Coumarin derivatives displaying antiallergenic activity  
 INVENTOR(S): Oganesyan, E. T.; Gushchin, I. S.; Simonyan, A. V.; Saraf, A. S.; Popov, A. N.  
 PATENT ASSIGNEE(S): Pyatigorsk Pharmaceutical Institute, USSR  
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1991, (31), 253.  
 CODEN: URXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1466217	A1	19910823	SU 1987-4288068	19870721
PRIORITY APPLN. INFO.:			SU 1987-4288068	19870721
AB Substituted amide derivs. of coumarin display antiallergenic activity. Four derivs. are presented.				
IT 57601-45-3	139964-77-5	139964-78-6		
139964-79-7				
RL: BIOL (Biological study) (allergy inhibitor)				
RN 57601-45-3	CAPLUS			
CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)				

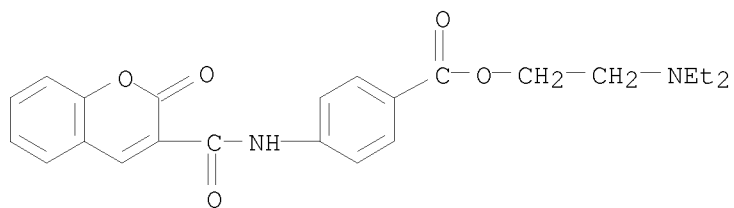


RN 139964-77-5 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-4-pyridinyl- (CA INDEX NAME)



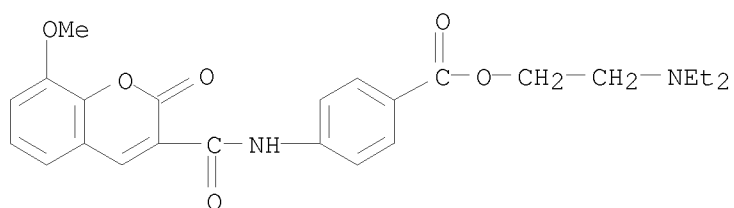
RN 139964-78-6 CAPLUS  
 CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)

10/513699



RN 139964-79-7 CAPLUS

CN Benzoic acid, 4-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)



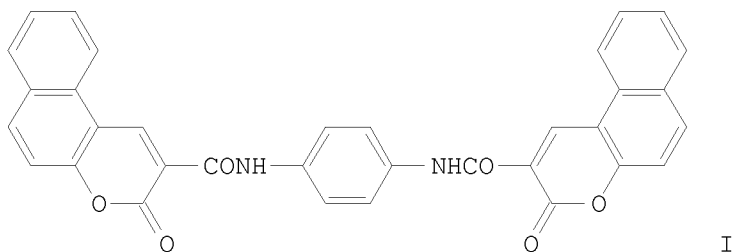


L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1979:612575 CAPLUS  
 DOCUMENT NUMBER: 91:212575  
 ORIGINAL REFERENCE NO.: 91:34265a,34268a  
 TITLE: Coumarin and benzocoumarin derivatives  
 INVENTOR(S): Bingham, Richard Charles  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA  
 SOURCE: Ger. Offen., 45 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2905447	A1	19790816	DE 1979-2905447	19790213
US 4177195	A	19791204	US 1978-898443	19780420
BE 874090	A1	19790813	BE 1979-193396	19790212
FR 2416925	A1	19790907	FR 1979-3475	19790212
FR 2416925	B1	19860321		
JP 54117534	A	19790912	JP 1979-14418	19790213
JP 62012823	B	19870320		
CH 642074	A5	19840330	CH 1979-1377	19790213
PRIORITY APPLN. INFO.:			US 1978-877462	A 19780213
			US 1978-898443	A 19780420

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
GI



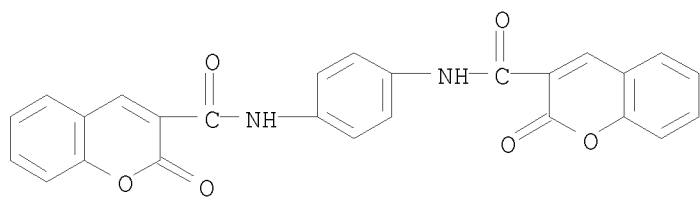
AB The title yellow to orange pigments, (RCONH)2Z, where R = an optionally substituted coumarin or benzocoumarin residue and Z = optionally substituted p-phenylene or 4-C6H4C6H4-4 are prepared and are used in acrylic lacquers showing better stability than com. yellow pigments. Thus, a mixture of 5,6-benzocoumarin-3-carbonyl chloride [71942-38-6] and p-phenylenediamine [106-50-3] in o-C6H4Cl2 was heated to give yellow, crystalline I [71942-50-2].

IT 71942-46-6P 71942-47-7P 71942-49-9P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)

RN 71942-46-6 CAPLUS

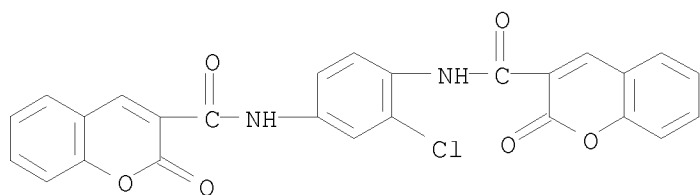
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[2-oxo- (CA INDEX  
 NAME)

10/513699



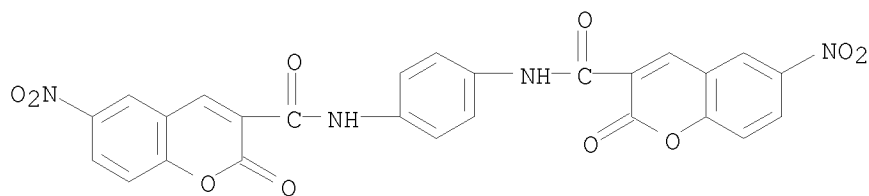
RN 71942-47-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-(2-chloro-1,4-phenylene)bis[2-oxo- (9CI) (CA INDEX NAME)



RN 71942-49-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[6-nitro-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

=> s 14

L8 678 L3

=> d ibib abs hitstr tot

THE ESTIMATED COST FOR THIS REQUEST IS 3939.18 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:n

REQUEST CANCELED

=> s 18 and py<2003

22998460 PY<2003

L9 380 L8 AND PY<2003

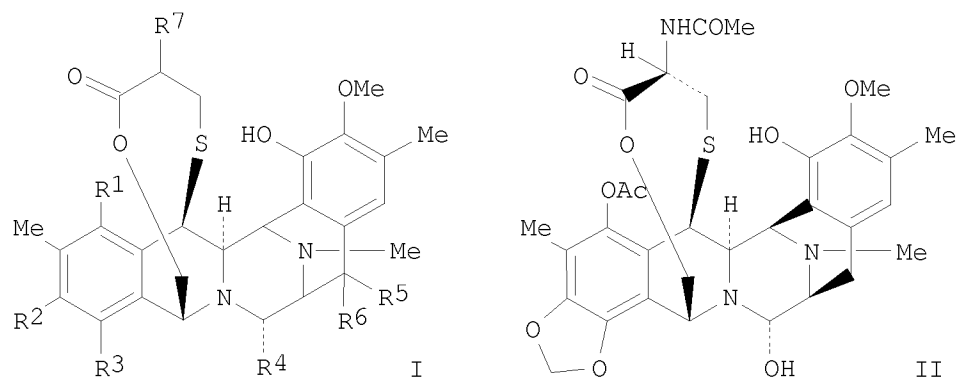
=> d ibib abs hitstr tot

THE ESTIMATED COST FOR THIS REQUEST IS 2207.80 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L9 ANSWER 1 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2008:737767 CAPLUS  
 DOCUMENT NUMBER: 149:79773  
 TITLE: Preparation of antitumoral ecteinascidin derivatives  
 INVENTOR(S): Flores, Maria; Francesh, Andres; Gallego, Pilar;  
 Chicharro, Jose Luis; Zarzuelo, Maria; Fernandez,  
 Carolina; Manzanares, Ignacio  
 PATENT ASSIGNEE(S): Pharmamar, Spain  
 SOURCE: U.S. Pat. Appl. Publ., 79pp., Cont.-in-part of U.S.  
 Ser. No. 240,963.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080146580	A1	20080619	US 2007-733606	20070410
WO 2000069862	A2	20001123	WO 2000-GB1852	20000515 <--
WO 2000069862	A3	20010322		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
WO 2001077115	A1	20011018	WO 2001-GB1667	20010412 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 2002007850	A	20040203	ZA 2002-7850	20020930
US 20030216397	A1	20031120	US 2003-240963	20030319
US 7202361	B2	20070410		
IN 2007DN05255	A	20070831	IN 2007-DN5255	20070706
PRIORITY APPLN. INFO.:				
			GB 2000-9043	A 20000412
			WO 2000-GB1852	A 20000515
			GB 2000-22644	A 20000914
			WO 2001-GB1667	W 20010412
			US 2003-240963	A2 20030319
			GB 1999-11345	A 19990514
			GB 1999-18178	A 19990802
			GB 1999-23632	A 19991006
			GB 2000-1063	A 20000117
			WO 2001-GB2120	W 20010515
			IN 2002-DN1012	A3 20021009
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): MARPAT 149:79773				
GI				



AB Antitumoral ecteinascidin derivs. of formula I [R1 = H, OH, acyloxy, etc.; R2 = OMe, R3 = OH; R2R3 = OCH2O; R4 = H, OH, CN; R5, R6 = H, OH, OMe, OEt; R5R6 = oxo; R7 = (substituted) NH2, OH] are prepared Thus, II was prepared, and had IC50 value of 0.1 ng/mL against HT-29 human colon carcinoma cells.

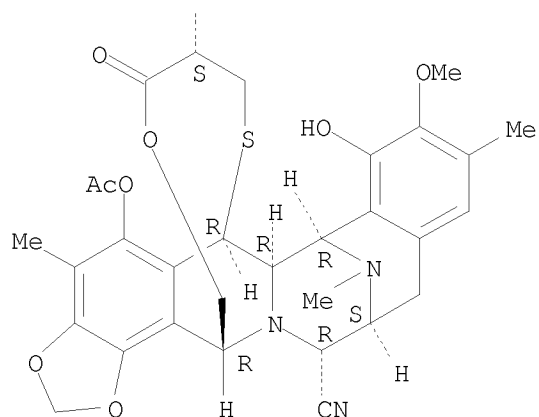
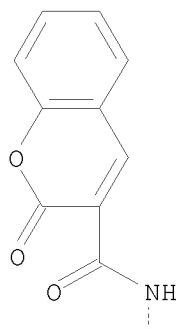
IT 1033697-44-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of ecteinascidin derivs. as antitumor agents)

RN 1033697-44-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[(6R,6aR,7R,13S,14R,16R,20S)-5-(acetyloxy)-14-cyano-6,6a,7,13,14,16-hexahydro-8-hydroxy-9-methoxy-4,10,23-trimethyl-19-oxo-6,16-(epithiopropoxymethano)-7,13-imino-12H-1,3-dioxolo[7,8]isoquino[3,2-b][3]benzazocin-20-yl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



IT 1033697-50-5P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of ecteinascidin derivs. as antitumor agents)

RN 1033697-50-5 CAPLUS

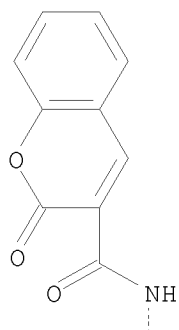
CN 2H-1-Benzopyran-3-carboxamide, N-[(6R,6aR,7R,13S,14S,16R,20S)-5-(acetyloxy)-6,6a,7,13,14,16-hexahydro-8,14-dihydroxy-9-methoxy-4,10,23-trimethyl-19-oxo-6,16-(epithiopropoxymethano)-7,13-imino-12H-1,3-

10/513699

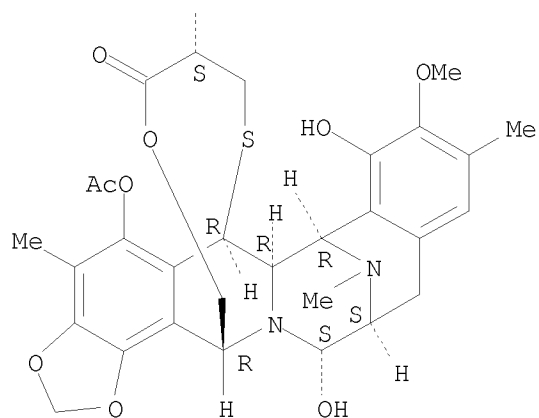
dioxolo[7,8]isoquino[3,2-b][3]benzazocin-20-yl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



<12/04/2007>

Erich Leese

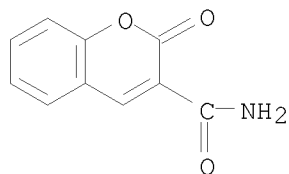
L9 ANSWER 2 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2006:380230 CAPLUS  
 DOCUMENT NUMBER: 145:356533  
 TITLE: The interaction of 2-iminocoumarin derivatives with acetic anhydride  
 AUTHOR(S): Gorobets, N. Yu.; Ermolaev, S. A.; Silin, A. V.; Nikltchenko, V. M.  
 CORPORATE SOURCE: Ukraine  
 SOURCE: Visnik Kharkivs'kogo Natsional'nogo Universitetu im. V. N. Karazina (2002), 573, 62-77  
 CODEN: VKNUAK  
 PUBLISHER: Kharkivs'kii Natsional'nii Universitet im. V. N. Karazina  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 145:356533  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The reactions of 2-iminocoumarins, e.g., I [R1 = H, OMe-6, R2 = H; R1 = H, R2 = Ph; R1 = Br-6, R2 = C6H4OMe-4; R1 = OMe-6, R2 = C6H4Me-4; R1 = NEt2-7, R2 = C6H4Me-4, thiazol-2-yl; R1 = OAc-7, OH-7, R2 = C6H4Cl-4] with acetic anhydride were studied. It was shown that unsubstituted 2-imino group derivs. underwent transformation into corresponding 2-acetylaminocoumarines, 7-hydroxy-2-iminocoumarin was regioselectively acetylated at the 7-hydroxygroup. Substituted at 2-imino group, 2-iminocoumarin-3-carboxamides were acetylated at the amide group. 6-Methoxy-2-[(4-bromophenyl)-hydrazono]coumarin-3-carboxamide (II) was desaminated under acetylation in DMF into 2,3-dihydrobenzopyrano[2,3-c]pyrazol-3-one (III). Reaction mechanisms and the influence of substituents were considered.

IT 1846-78-2  
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
 (acetylation of; chemoselectivity of interaction of 2-iminocoumarin derivs. with acetic anhydride)

RN 1846-78-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)

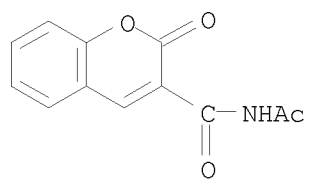


IT 910218-28-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (chemoselectivity of interaction of 2-iminocoumarin derivs. with acetic anhydride)

RN 910218-28-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-acetyl-2-oxo- (CA INDEX NAME)



10/513699



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 3 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:497502 CAPLUS

DOCUMENT NUMBER: 143:53440

TITLE: Substituted benzoimidazole compounds as transcription factor-modulating compounds useful as anti-infectives

INVENTOR(S): Levy, Stuart B.; Alekshun, Michael N.; Podlogar, Brent L.; Ohemeng, Kwasi; Verma, Atul K.; Warchol, Tadeusz; Bhatia, Beena; Bowser, Todd; Grier, Mark

PATENT ASSIGNEE(S): Paratek Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 463 pp., Cont.-in-part of U.S. Ser. No. 139,591.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050124678	A1	20050609	US 2003-700661	20031103
US 7405235	B2	20080729		
CA 2445515	A1	20021104	CA 2002-2445515	20020506 <--
AU 2002367953	A1	20040106	AU 2002-367953	20020506
AU 2002367953	B2	20080717		
EP 1524974	A2	20050427	EP 2002-807554	20020506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005519998	T	20050707	JP 2004-515557	20020506
US 20030229065	A1	20031211	US 2002-139591	20020814
US 20040106553	A1	20040603	US 2003-602562	20030624
US 20090131401	A1	20090521	US 2008-69723	20080212
AU 2008203017	A1	20080731	AU 2008-203017	20080708
PRIORITY APPLN. INFO.:				
			US 2001-288660P	P 20010504
			US 2002-139591	A2 20020814
			US 2002-423319P	P 20021101
			US 2002-425916P	P 20021113
			AU 2002-367953	A3 20020506
			WO 2002-US14255	W 20020506
			US 2002-391345P	P 20020624
			US 2002-421218P	P 20021025
			US 2002-429142P	P 20021126
			US 2003-458935P	P 20030331
			US 2003-700661	A3 20031103

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:53440

AB Substituted benzoimidazole compds. useful as anti-infectives that decrease resistance, virulence, or growth of microbes are provided. Methods of making and using substituted benzoimidazole compds., as well as pharmaceutical preps. thereof, in, e.g., reducing antibiotic resistance and inhibiting biofilms. The present invention identifies microbial transcription factors, especially transcription factors of the AraC-XylS family, as virulence factors in microbes and shows that inhibition of these factors reduces the virulence of microbial cells. Because these transcription factors control virulence, rather than essential cellular processes, the development of resistance is much less likely.

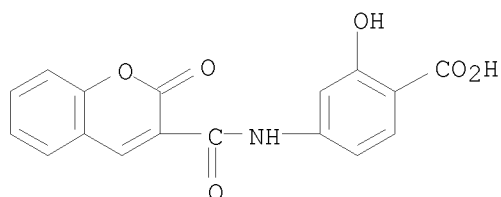
IT 156172-93-9 309274-37-1

10/513699

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(substituted benzoimidazole compds. as transcription factor-modulating  
compds. useful as anti-infectives)

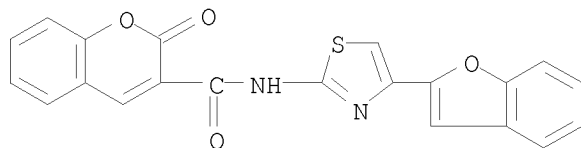
RN 156172-93-9 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
(CA INDEX NAME)



RN 309274-37-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2-benzofuranyl)-2-thiazolyl]-2-oxo-  
(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)  
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:874701 CAPLUS

DOCUMENT NUMBER: 141:314154

TITLE: A process for the preparation of  
2-oxo(2H)-1-benzopyrans (coumarins)INVENTOR(S): Rao, Pamulaparty Shanihan; Srinivas, Koosampally;  
Krishna, Konddaveti Leela; Sivaprasad, Attaluri

PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India

SOURCE: Indian, 9 pp.  
CODEN: INXXAP

DOCUMENT TYPE: Patent

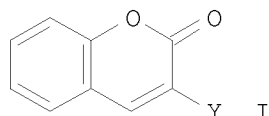
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 184895	A1	20001007	IN 1996-DE663	19960327 <--
PRIORITY APPLN. INFO.:			IN 1996-DE663	19960327
OTHER SOURCE(S):		CASREACT 141:314154; MARPAT 141:314154		

GI



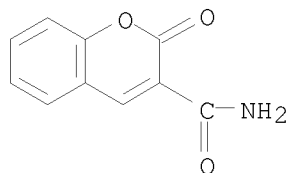
AB A new process for the preparation of 3-substituted 2-oxo(2H)-1-benzopyrans (coumarins) [I; Y = cyano, ethoxycarbonyl, carboxamide, carboxylic, benzoylamine, benzimidazolyl or benzoylbenzimidazolyl group] which comprises reacting a compound containing active methylene group with salicylaldehyde in the presence of a catalyst such as zinc chloride at a temperature in the range of 40°-180°C and recovering the 3-substituted 2-oxo(2H)-1-benzopyrans by conventional methods. Thus, reacting salicylaldehyde with Et cyanoacetate in the presence of ZnCl<sub>2</sub> in CHCl<sub>3</sub> afforded 82% I [Y = CO<sub>2</sub>Et].

IT 1846-78-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of 2-oxo(2H)-1-benzopyrans (coumarins) by reacting  
salicylaldehyde with compds. containing active methylene group)

RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



L9 ANSWER 5 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:473189 CAPLUS  
 DOCUMENT NUMBER: 141:35979  
 TITLE: Ion channel assay methods using repetitive application  
 of electric fields to set transmembrane potential  
 INVENTOR(S): Maher, Michael P.; Gonzalez, Jesus E.  
 PATENT ASSIGNEE(S): Vertex Pharmaceuticals (San Diego) LLC, USA  
 SOURCE: U.S. Pat. Appl. Publ., 95 pp., Cont.-in-part of U.S.  
 Pat. Appl. 2002 45,159.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040110123	A1	20040610	US 2003-620312	20030714
US 7615356	B2	20091110		
US 7399599	B2	20080715	US 2001-804457	20010312 <--
US 20020045159	A1	20020418		
AU 2004269322	A1	20050310	AU 2004-269322	20040708
CA 2532973	A1	20050310	CA 2004-2532973	20040708
WO 2005022113	A2	20050310	WO 2004-US22047	20040708
WO 2005022113	A3	20050519		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1644497	A2	20060412	EP 2004-801966	20040708
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007534927	T	20071129	JP 2006-520237	20040708
US 20060216688	A1	20060928	US 2006-443697	20060531
US 20060281069	A1	20061214	US 2006-444214	20060531
US 7611850	B2	20091103		

PRIORITY APPLN. INFO.:  
 US 2000-217671P P 20000710  
 US 2001-804457 A2 20010312  
 US 2003-620312 A 20030714  
 WO 2004-US22047 W 20040708

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method of characterizing the biol. activity of a candidate compound may  
 include exposing cells to the candidate compound, and then exposing the  
 cells to a repetitive application of elec. fields so as to set the  
 transmembrane potential to a level corresponding to a pre-selected voltage  
 dependent state of a target ion channel. A 96 well plate assay was  
 developed for antagonists of the L-type calcium channel that incorporates  
 elec. stimulation in the presence of DISBAC2(3) and CC2-DMPE  
 voltage-sensitive FRET probes.

IT 393782-57-5, CC2-DMPE

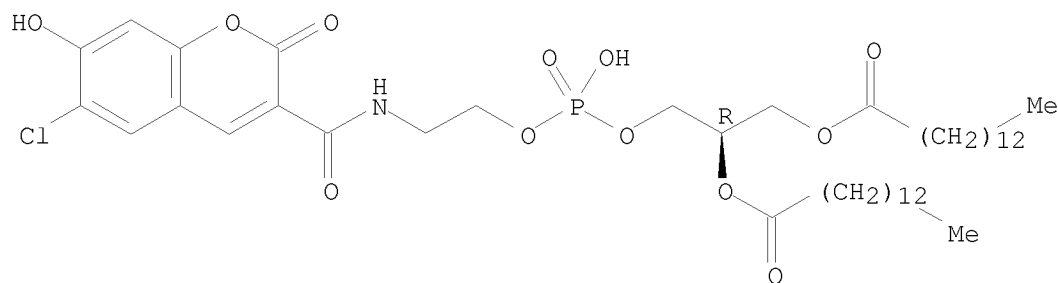
10/513699

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(ion channel assay methods using repetitive application of elec. fields  
to set transmembrane potential)

RN 393782-57-5 CAPLUS

CN Tetradecanoic acid, 1,1'-[(1R)-1-[8-(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)-3-hydroxy-3-oxido-8-oxo-2,4-dioxo-7-aza-3-phosphaoct-1-yl]-1,2-ethanediyl] ester (CA INDEX NAME)

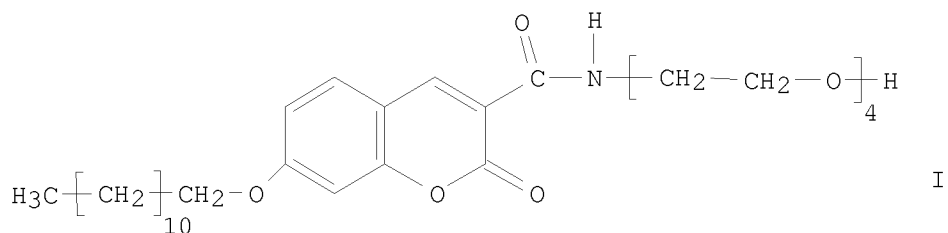
Absolute stereochemistry.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

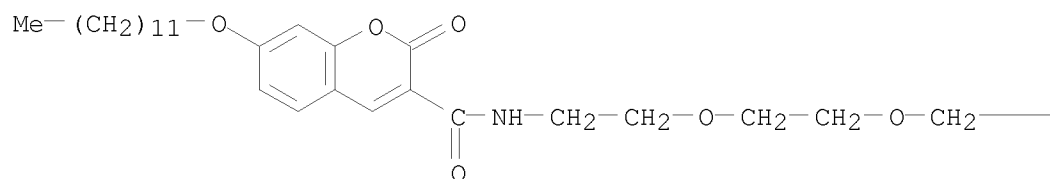
10/513699

L9 ANSWER 6 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2004:163775 CAPLUS  
DOCUMENT NUMBER: 141:395110  
TITLE: Synthesis of a fluorescent amphiphilic molecule for  
interface visualization  
AUTHOR(S): Pere-Gigante, A.; Boulmedais, F.; Carre, M. C.;  
Viriot, M. L.  
CORPORATE SOURCE: Groupe de Recherches et Applications en Photophysique  
et Photochimie, Departement de Chimie Physique des  
Reactions, UMR 7630 CNRS-INPL, Nancy, 54001, Fr.  
SOURCE: Recents Progres en Genie des Procedes (2001  
, 15(84, Genie des Produits et Formulation), 69-76  
CODEN: RPGPEX; ISSN: 1166-7478  
PUBLISHER: Tec & Doc - Lavoisier  
DOCUMENT TYPE: Journal  
LANGUAGE: French  
OTHER SOURCE(S): CASREACT 141:395110  
GI



AB The nonphotodegradable surfactant I was prepared and used to examine and  
visualize the dynamics at interfaces in complex polyphase systems.  
IT 790301-35-8P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of fluorescent amphiphilic mol. for interface visualization)  
RN 790301-35-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-(dodecyloxy)-N-[2-[2-[2-(2-  
hydroxyethoxy)ethoxy]ethoxy]ethyl]-2-oxo- (CA INDEX NAME)

PAGE 1-A



10/513699

PAGE 1-B

— CH<sub>2</sub>— O— CH<sub>2</sub>— CH<sub>2</sub>— OH

REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese



L9 ANSWER 7 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:971725 CAPLUS

DOCUMENT NUMBER: 140:35893

TITLE: Transcription factor modulating compounds and methods of use thereof

INVENTOR(S): Levy, Stuart B.; Alekshun, Michael N.; Podlogar, Brent L.; Ohemeng, Kwasi; Verma, Atul K.; Warchol, Tadeusz; Bhatia, Beena

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 301 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030229065	A1	20031211	US 2002-139591	20020814
CA 2445515	A1	20021104	CA 2002-2445515	20020506 <--
WO 2004001058	A2	20031231	WO 2002-US14255	20020506
WO 2004001058	A3	20050303		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002367953	A1	20040106	AU 2002-367953	20020506
AU 2002367953	B2	20080717		
EP 1524974	A2	20050427	EP 2002-807554	20020506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005519998	T	20050707	JP 2004-515557	20020506
US 20050124678	A1	20050609	US 2003-700661	20031103
US 7405235	B2	20080729		
US 20090131401	A1	20090521	US 2008-69723	20080212
AU 2008203017	A1	20080731	AU 2008-203017	20080708
PRIORITY APPLN. INFO.:				
			US 2001-288660P	P 20010504
			AU 2002-367953	A3 20020506
			WO 2002-US14255	W 20020506
			US 2002-139591	A2 20020814
			US 2002-423319P	P 20021101
			US 2002-425916P	P 20021113
			US 2003-700661	A3 20031103

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 140:35893

AB Methods for identifying compound useful as anti-infectives that decrease resistance, virulence, or growth of microbes are provided. In one embodiment, the method comprises contacting a microbial cell comprising: (1) a selectable marker under the control of a transcription factor responsive element and (2) a transcription factor, with a compound under conditions which allow interaction of the compound with the microbial cell;

10/513699

and measuring the ability of the compound to affect the growth or survival of the microbial cell as an indication of whether the test compound modulates the activity of a transcription factor.

IT 156172-93-9 309274-37-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

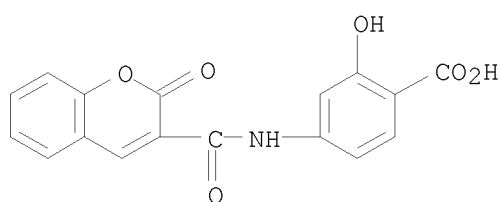
(transcription factor modulating compds. as anti-infectives agents that decrease resistance and virulence and growth identified by determining

marker

under control of responsive element)

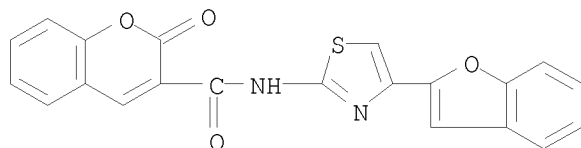
RN 156172-93-9 CAPLUS

CN Benzoic acid, 2-hydroxy-4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
(CA INDEX NAME)



RN 309274-37-1 CAPLUS

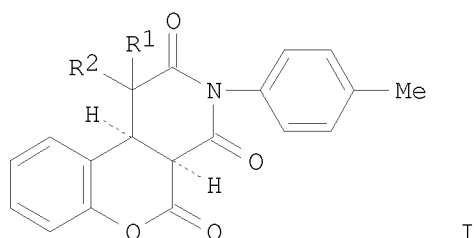
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2-benzofuranyl)-2-thiazolyl]-2-oxo-  
(CA INDEX NAME)



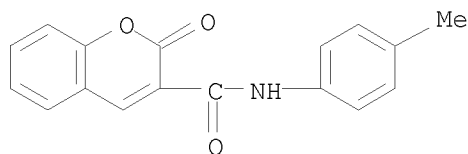
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 8 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2003:320690 CAPLUS  
DOCUMENT NUMBER: 139:85261  
TITLE: Synthesis of 4a,10b-dihydro-1H-chromeno[3,4-c]pyridine-  
2,4,5-triones via the Reformatskii reaction  
AUTHOR(S): Shchepin, V. V.; Fotin, D. V.  
CORPORATE SOURCE: Perm State University, Perm, 614000, Russia  
SOURCE: Chemistry of Heterocyclic Compounds (New York, NY,  
United States) (Translation of Khimiya  
Geterotsiklicheskikh Soedinenii) (2002),  
38(11), 1430-1431  
CODEN: CHCCAL; ISSN: 0009-3122  
PUBLISHER: Kluwer Academic/Consultants Bureau  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 139:85261  
GI



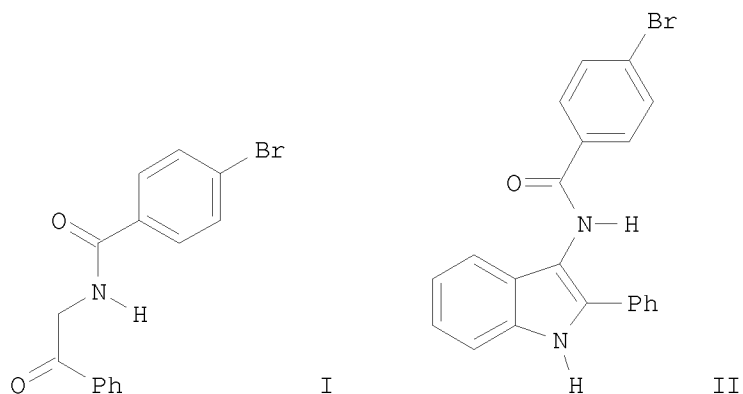
AB Title compds. I (R1 = H, R2 = H, Et; R1 = R2 = Me) were prepared by the  
Reformatskii reaction of chromenecarboxanilide II with R1R2CBrCOOMe.  
Yields were 68-81%.  
IT 1847-00-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(4a,10b-dihydro-1H-chromeno[3,4-c]pyridine-2,4,5-triones via  
Reformatskii reaction of oxochromenecarboxanilide with bromo esters)  
RN 1847-00-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

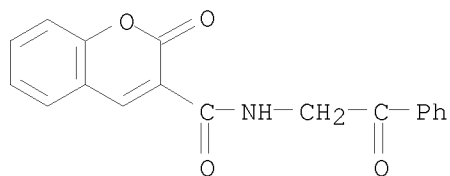
10/513699

L9 ANSWER 9 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2003:151381 CAPLUS  
DOCUMENT NUMBER: 138:353801  
TITLE: Fischer synthesis of 3-(N-acylamino)-2-phenylindoles  
AUTHOR(S): Przheval'skii, N. M.; Skvortsova, N. S.; Magedov, I. V.  
CORPORATE SOURCE: K. A. Timiryazev Moscow Agricultural Academy, Moscow, 127550, Russia  
SOURCE: Chemistry of Heterocyclic Compounds (New York, NY, United States) (Translation of Khimiya Geterotsiklicheskikh Soedinenii) (2002), 38(9), 1055-1061  
CODEN: CHCCAL; ISSN: 0009-3122  
PUBLISHER: Kluwer Academic/Consultants Bureau  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 138:353801  
GI

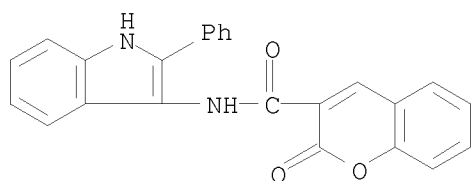


AB Phenylhydrazones were obtained by the reaction of phenylhydrazine with  $\omega$ -(N-acylamino)acetophenones, e.g., I, and were converted into 3-(N-acylamino)indoles, e.g., II, by the Fischer cyclization.  
IT 51980-94-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of (acylamino)phenylindoles via coupling of aminoacetophenone with acyl chlorides followed by condensation with phenylhydrazine, heterocyclization, and rearrangement)  
RN 51980-94-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-oxo-2-phenylethyl)- (CA INDEX NAME)

10/513699



IT 519166-86-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of (acylamino)phenylindoles via coupling of aminoacetophenone  
with acyl chlorides followed by condensation with phenylhydrazine,  
heterocyclization, and rearrangement)  
RN 519166-86-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-phenyl-1H-indol-3-yl)- (CA  
INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)  
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:92347 CAPLUS

DOCUMENT NUMBER: 138:119298

TITLE: Cytochrome P450 substrates and their use as optical sensors in screening for cytochrome p450 modulators

INVENTOR(S): Makings, Lewis R.; Zlokarnik, Gregor

PATENT ASSIGNEE(S): Vertex Pharmaceuticals (San Diego), L.L.C., USA

SOURCE: U.S., 68 pp., Cont.-in-part of U.S. Ser. No. 301,525.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6514687	B1	20030204	US 1999-458927	19991210
US 6420130	B1	20020716	US 1999-301525	19990428 <--
US 20030027238	A1	20030206	US 2001-995961	20011127
US 6638713	B2	20031028		
US 20030186349	A1	20031002	US 2002-327022	20021220
US 7132252	B2	20061107		
US 20070072256	A1	20070329	US 2006-531136	20060912
US 20080125586	A1	20080529	US 2007-953770	20071210
PRIORITY APPLN. INFO.:			US 1998-112252P	P 19981214
			US 1999-301525	A2 19990428
			US 1999-458927	A1 19991210
			US 2002-327022	A1 20021220
			US 2006-531136	A1 20060912

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 138:119298

AB The invention provides a compound, useful as an optical probe or sensor of the activity of at least one cytochrome P 450 enzyme, and methods of using the compound to screen candidate drugs, and candidate drugs identified by these methods. The optical probe of the invention is a compound having the generic structure Y-L-Q, (Y = Q, saturated C1-C20 alkyl, unsatd. C1-C20 alkenyl, unsatd. C1-C20 alkynyl, substituted saturated C1-C20 alkyl, substituted unsatd. C1-C20 alkenyl, substituted unsatd. C1-C20 alkynyl, C1-C20 cycloalkyl, C1-C20 cycloalkenyl, substituted saturated C1-C20 cycloalkyl, substituted unsatd. C1-C20 cycloalkenyl, aryl, substituted aryl, heteroaryl and substituted heteroaryl; L = (-OCR<sub>2</sub>H)p-, wherein for each p, all R<sub>2</sub> = H, saturated C1-C20 alkyl, unsatd. C1-C20 alkenyl, unsatd. C1-C20 alkynyl, substituted saturated C1-C20 alkyl, substituted unsatd. C1-C20 alkenyl, substituted unsatd. C1-C20 alkynyl, C1-C20 cycloalkyl, C1-C20 cycloalkenyl, substituted saturated C1-C20 cycloalkyl, substituted unsatd. C1-C20 cycloalkenyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl; p = 1-12; Q = chemical moiety that gives rise to optical properties in its hydroxy or hyrdoxylate, phenol or phenoxide form that are different from the optical properties that arise from its ether form). Most preferably, p is one, R<sub>2</sub> is hydrogen, and Q is the ether form of a phenoxide fluorophore. Thus, new substrates suitable for high throughput screening of CYP 3A4, CYP 2C19, CYP 2C9, CYP 1A2, and CYP 2B6 were synthesized and their kinetic properties were analyzed. Benzyloxymethylresorufin (BOMR) and 7-benzyloxymethyloxy-3-cyanocoumarin (BOMCC) were used to identify inhibitors of CYP 3A4.

IT 277309-44-1P

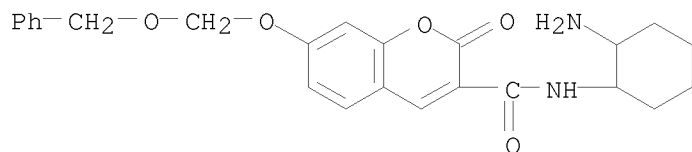
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST

10/513699

(Analytical study); PREP (Preparation); USES (Uses)  
(cytochrome P 450 substrates and their use as optical sensors in  
screening for cytochrome P 450 modulators)

RN 277309-44-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminocyclohexyl)-2-oxo-7-  
[(phenylmethoxy)methoxy]- (CA INDEX NAME)



REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 11 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:48131 CAPLUS

DOCUMENT NUMBER: 138:385365

TITLE: Synthesis and antibacterial activity of some new hydrazides and 1,3,4-oxadiazoles of coumarin derivatives

AUTHOR(S): Desai, Devki; Mehta, R. H.

CORPORATE SOURCE: Department of Chemistry, Faculty of Science, M.S. University of Baroda, Vadodara, 390 002, India

SOURCE: Indian Journal of Heterocyclic Chemistry (2002), 12(2), 171-172

CODEN: IJCHEI; ISSN: 0971-1627

PUBLISHER: Prof. R. S. Varma

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:385365

AB Coumarin incorporated 1,3,4-oxadiazoles have been prepared by the condensation of coumarin-3-carboxylic acids with benzoic acid hydrazides in presence of POCl<sub>3</sub>. Some of the synthesized compds. were found moderately active at 500 ppm concentrate against E. Coli.

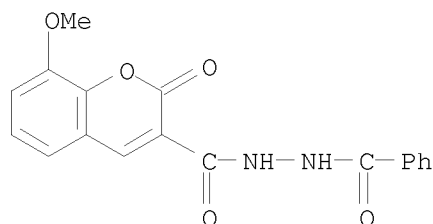
IT 324065-08-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of hydrazides and oxadiazoles of coumarin derivs. via condensation of coumarincarboxylic acids with benzoic acid hydrazides followed by ring closure)

RN 324065-08-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-, 2-benzoylhydrazide (CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



10/513699

L9 ANSWER 12 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:882006 CAPLUS

DOCUMENT NUMBER: 138:304122

TITLE: Synthesis of new coumarin derivatives

AUTHOR(S): Kim, Jung-Hwan; Lee, Eun-Jung

CORPORATE SOURCE: Department of Chemistry, Yeungnam University,  
Gyongsan, 712-749, S. Korea

SOURCE: Journal of the Korean Chemical Society (2002  
, 46(5), 462-466

CODEN: JKCSEZ; ISSN: 1017-2548

PUBLISHER: Korean Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: Korean

OTHER SOURCE(S): CASREACT 138:304122

AB Reaction of Et 2-oxo-3-chromancarboxylate (I) with diamino compds. in EtOH  
in the presence of Na gave the condensation product. For example,  
reaction of I with ethylenediamine gave 64%  
3,3'-(ethylene)dicoumarinoyldiamide.

IT 1847-03-6P 17387-09-6P 71942-46-6P

99275-34-0P 511286-93-4P 511286-94-5P

511286-95-6P 511286-96-7P 511286-97-8P

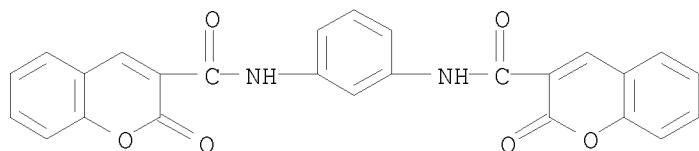
511286-98-9P 511286-99-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of coumarin derivs. by condensation of chromanonecarboxylate  
with diamines)

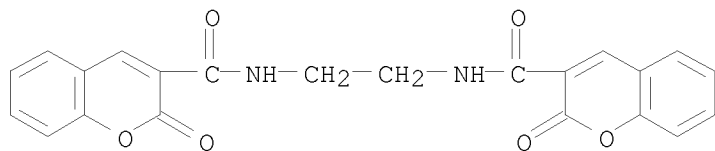
RN 1847-03-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,3-phenylenebis[2-oxo- (CA INDEX  
NAME)



RN 17387-09-6 CAPLUS

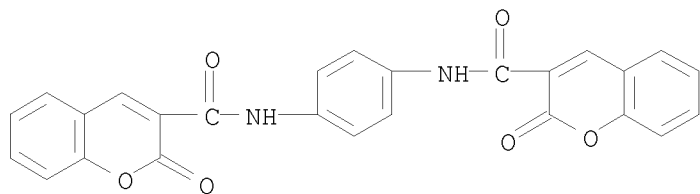
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,2-ethanediylbis[2-oxo- (CA INDEX  
NAME)



RN 71942-46-6 CAPLUS

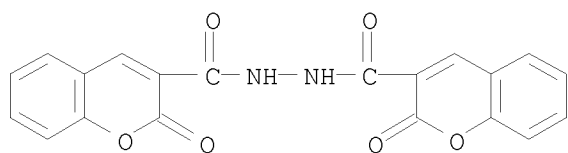
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[2-oxo- (CA INDEX  
NAME)

10/513699



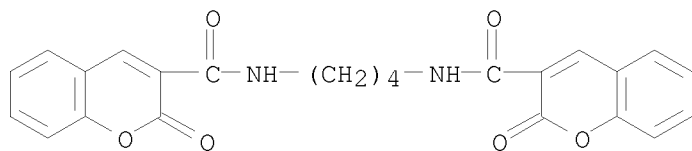
RN 99275-34-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



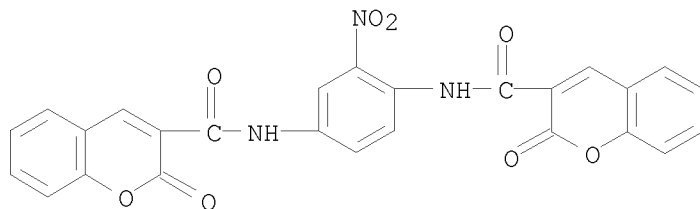
RN 511286-93-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-butanediylbis[2-oxo- (CA INDEX NAME)



RN 511286-94-5 CAPLUS

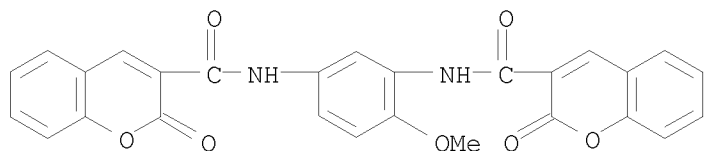
CN 2H-1-Benzopyran-3-carboxamide, N,N'-(2-nitro-1,4-phenylene)bis[2-oxo- (CA INDEX NAME)



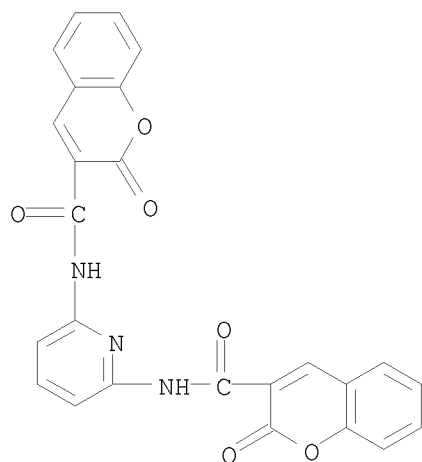
RN 511286-95-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-(4-methoxy-1,3-phenylene)bis[2-oxo- (9CI) (CA INDEX NAME)

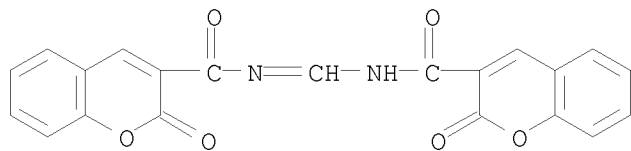
10/513699



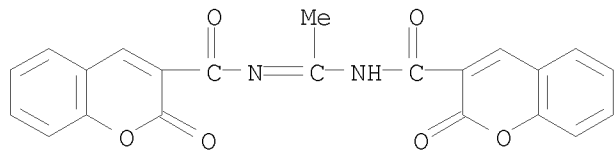
RN 511286-96-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N,N'-2,6-pyridinediylbis[2-oxo- (CA INDEX NAME)



RN 511286-97-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methylene]- (9CI) (CA INDEX NAME)



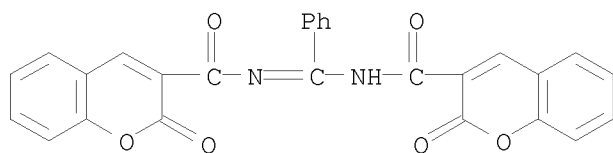
RN 511286-98-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[1-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyldene]- (9CI) (CA INDEX NAME)



RN 511286-99-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[[[(2-oxo-2H-1-benzopyran-3-

10/513699

yl)carbonyl]amino]phenylmethylene]- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 13 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:829792 CAPLUS

DOCUMENT NUMBER: 137:322171

TITLE: A sensitive and specific enzyme-based assay detecting HIV-1 virion fusion in primary T lymphocytes

AUTHOR(S): Cavrois, Marielle; de Noronha, Carlos; Greene, Warner C.

CORPORATE SOURCE: Gladstone Institute of Virology and Immunology, University of California, San Francisco, CA, 94141-9100., USA

SOURCE: Nature Biotechnology (2002), 20(11), 1151-1154

CODEN: NABIF9; ISSN: 1087-0156

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB As an early event in the viral life cycle, the entry of enveloped viruses into target cells has received considerable attention. Viral fusion to cellular targets has been studied principally with fusion assays in which cells engineered to express the viral envelope are cultured with the target cells. These assays yield valuable information but do not fully recapitulate all of the variables governing the fusion of actual virions to their cellular targets. The virion membrane and the plasma membrane, for example, differ strikingly in their lipid and protein compns. Two virion-based fusion assays have been described. One is based on the redistribution of a self-quenching fluorophore, whereas the second depends on photosensitized activation of a hydrophobic probe by a fluorescent lipid loaded into the target membrane. These assays are complex and have not been adapted to study fusion in complex cell populations. The authors have developed a simple, rapid assay allowing the detection of HIV-1 virion fusion to biol. relevant target cells, including primary CD4+ T lymphocytes. It is based on the incorporation of  $\beta$ -lactamase-Vpr chimeric proteins (BlaM-Vpr) into HIV-1 virions and their subsequent delivery into the cytoplasm of target cells as a result of virion fusion. This transfer is then detected by enzymic cleavage of the CCF2 dye, a fluorescent substrate of  $\beta$ -lactamase (BlaM), loaded in the target cells. BlaM cleaves the  $\beta$ -lactam ring in CCF2, changing its fluorescence emission spectrum from green (520 nm) to blue (447 nm) and thereby allowing fusion to be detected by fluorescence microscopy, flow cytometry, or UV photometry.

IT 183736-52-9

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(sensitive and specific enzyme-based assay detecting HIV-1 virion fusion in primary T lymphocytes)

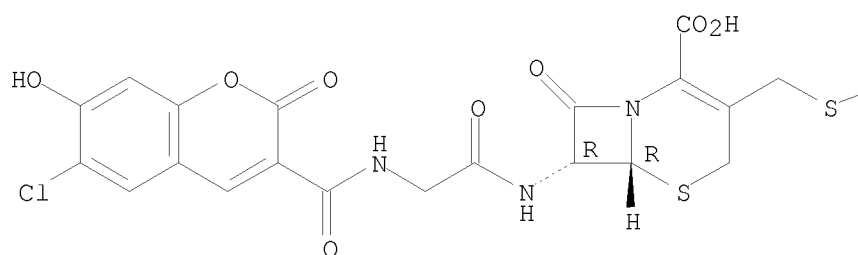
RN 183736-52-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3-[[ (3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-,  
(6R,7R)- (9CI) (CA INDEX NAME)

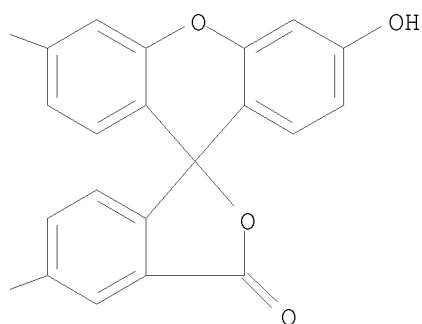
Absolute stereochemistry.

PAGE 1-A

HO—



PAGE 1-B



OS.CITING REF COUNT: 96

THERE ARE 96 CAPLUS RECORDS THAT CITE THIS  
RECORD (96 CITINGS)

REFERENCE COUNT: 16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 14 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:671831 CAPLUS

DOCUMENT NUMBER: 137:210982

TITLE: Sulfonylaminocarbonyl derivatives for the treatment of nuclear factor-kappa B mediated diseases and disorders

INVENTOR(S): Cornicelli, Joseph Anthony; Karathanasis, Sotirios K.

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: Eur. Pat. Appl., 75 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1236468	A1	20020904	EP 2002-2612	20020205 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2369967	A1	20020812	CA 2002-2369967	20020201 <--
AU 2002015394	A	20020815	AU 2002-15394	20020204 <--
NZ 517021	A	20030926	NZ 2002-517021	20020204
JP 2002275062	A	20020925	JP 2002-32755	20020208 <--
US 20020183384	A1	20021205	US 2002-71034	20020208 <--
CN 1370526	A	20020925	CN 2002-104763	20020210 <--
HU 2002000493	A2	20021028	HU 2002-493	20020211 <--
HU 2002000493	A3	20030428		
ZA 2002001161	A	20030811	ZA 2002-1161	20020211
PRIORITY APPLN. INFO.:			US 2001-268203P	P 20010212
OTHER SOURCE(S): MARPAT 137:210982				

AB The present invention provides a method of treating a disease or a disorder responsive to inhibition of nuclear factor- $\kappa$ B transcription factors comprising administering to a patient in need thereof a sulfonylaminocarbonyl derivative, or a pharmaceutically acceptable salt thereof. The methods of the present invention are useful for treating, for example, rheumatoid arthritis, osteoarthritis, an autoimmune disease, psoriasis, asthma, a cardiovascular disease, an acute coronary syndrome, congestive heart failure, Alzheimer's disease, multiple sclerosis, cancer, type II diabetes, metabolic syndrome X, or inflammatory bowel disease.

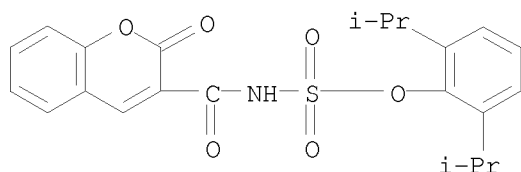
IT 454204-08-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sulfonylaminocarbonyl derivs. for treatment of nuclear factor-kappa B mediated diseases and disorders)

RN 454204-08-1 CAPLUS

CN Sulfamic acid, [(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, 2,6-bis(1-methylethyl)phenyl ester (9CI) (CA INDEX NAME)



10/513699

OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	20	THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 15 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:626678 CAPLUS

DOCUMENT NUMBER: 138:137121

TITLE: Development of a functionalized dendritic monomer and application to sophisticated light harvesting systems  
AUTHOR(S): Dichtel, William R.; Hecht, Stefan; Frechet, Jean M. J.

CORPORATE SOURCE: Dept. of Chemistry, Univ. of California, Berkeley, CA, 94720-1460, USA

SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2002), 43(2), 985

CODEN: ACPPAY; ISSN: 0032-3934

PUBLISHER: American Chemical Society, Division of Polymer Chemistry

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:137121

AB The synthesis of the desired functionalized dendritic monomer was described; this compound is useful in applications to sophisticated light harvesting systems (no data).

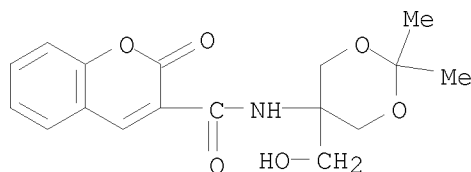
IT 492462-67-6P 492462-68-7P 492462-69-8P  
492462-70-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(development of coumarin-functionalized dendritic monomer for application to sophisticated light harvesting systems)

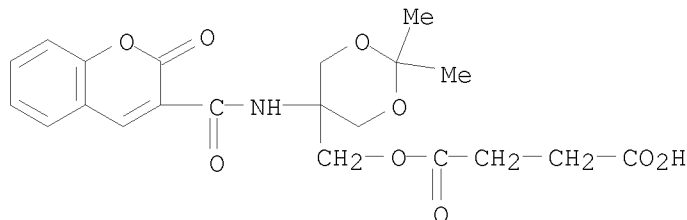
RN 492462-67-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[5-(hydroxymethyl)-2,2-dimethyl-1,3-dioxan-5-yl]-2-oxo- (CA INDEX NAME)



RN 492462-68-7 CAPLUS

CN Butanedioic acid, 1-[[2,2-dimethyl-5-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1,3-dioxan-5-yl]methoxy] ester (CA INDEX NAME)



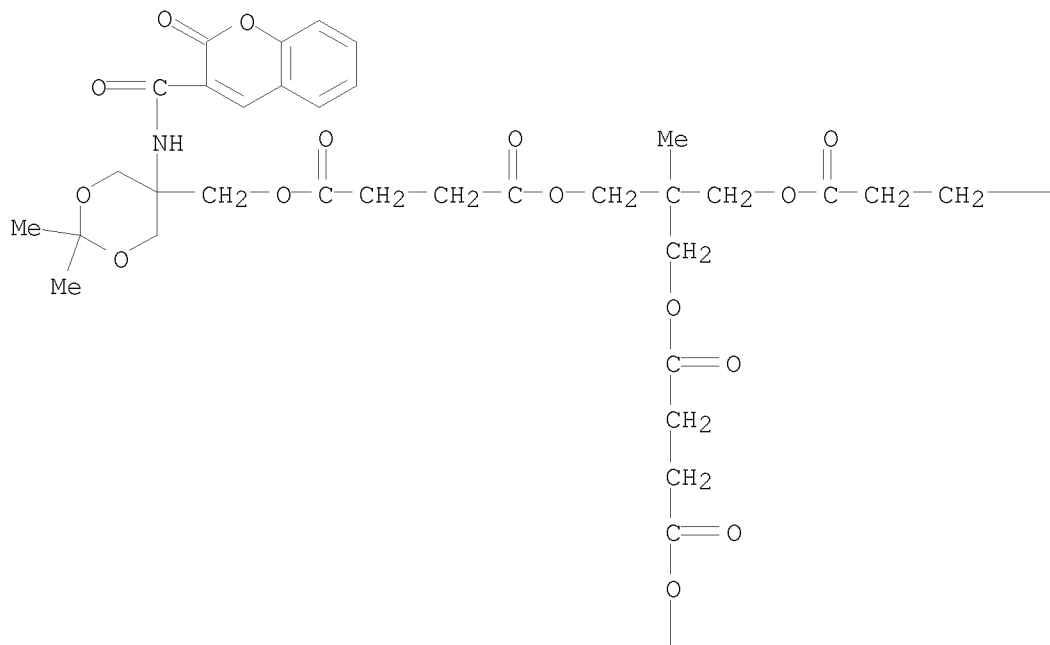
RN 492462-69-8 CAPLUS

CN Butanedioic acid, 2-[[4-[[2,2-dimethyl-5-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1,3-dioxan-5-yl]methoxy]-1,4-dioxobutoxy]methyl]-2-

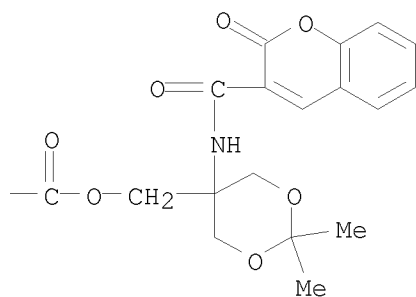
10/513699

methyl-1,3-propanediyl bis[[2,2-dimethyl-5-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1,3-dioxan-5-yl]methyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

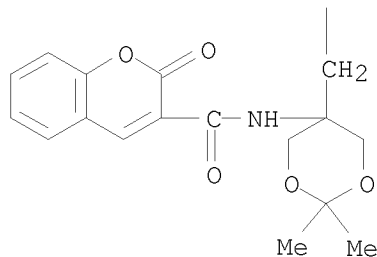


PAGE 1-B



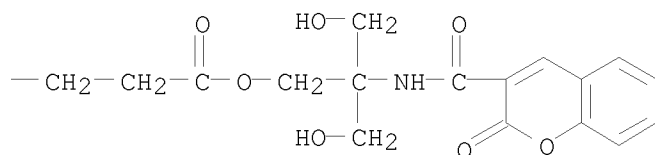
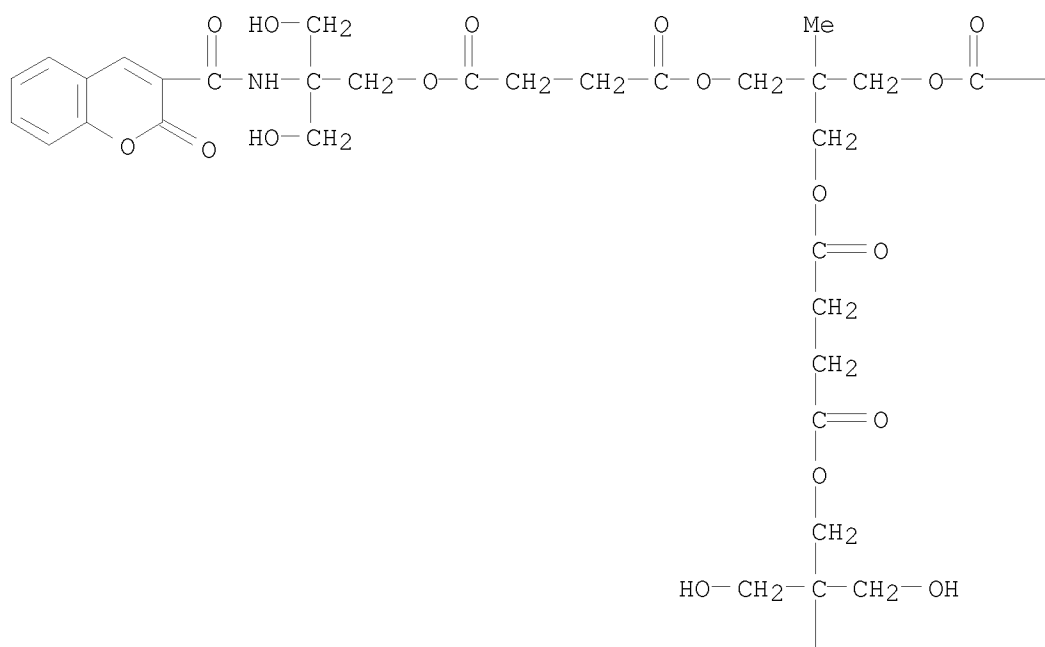
<12/04/2007>

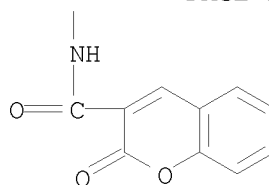
Erich Leese



RN 492462-70-1 CAPLUS

CN Butanedioic acid, 2-[[4-[3-hydroxy-2-(hydroxymethyl)-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]propoxy]-1,4-dioxobutoxy]methyl]-2-methyl-1,3-propanediyl bis[3-hydroxy-2-(hydroxymethyl)-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]propyl] ester (9CI) (CA INDEX NAME)

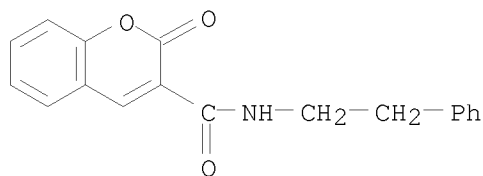




OS.CITING REF COUNT:	2	THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT:	4	THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

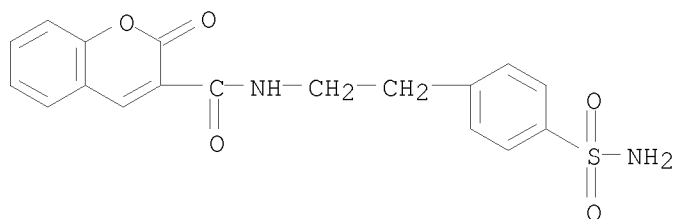
10/513699

L9 ANSWER 16 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:495481 CAPLUS  
DOCUMENT NUMBER: 138:221327  
TITLE: Synthesis and <sup>1</sup>H and <sup>13</sup>C NMR structural study of  
N-[4-[2-(2-oxo-2H-1-benzopyran-3-carboxamido)ethyl]benzensulfonyl]-N'-cyclohexylurea  
and N-[4-[2-(4-nitrobenzamido)ethyl]benzensulfonyl]-N'-cyclohexylurea  
AUTHOR(S): Espinosa, Miguel A.; Tamariz, Joaquin;  
Padilla-Martinez, Itzia I.; Martinez-Martinez,  
Francisco J.  
CORPORATE SOURCE: Departamento de Quimica, Unidad Profesional  
Interdisciplinaria de Biotecnologia del IPN, Mexico,  
07340, Mex.  
SOURCE: Revista de la Sociedad Quimica de Mexico (2001  
) , 45(4), 214-217  
CODEN: RSQMAN; ISSN: 0583-7693  
PUBLISHER: Sociedad Quimica de Mexico  
DOCUMENT TYPE: Journal  
LANGUAGE: Spanish  
OTHER SOURCE(S): CASREACT 138:221327  
AB The title compds. were prepared from Et 3-coumarincarboxylate or  
4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COC<sub>1</sub> and PhCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>, followed by cyclohexyl isocyanate. Full  
assignment of <sup>1</sup>H and <sup>13</sup>C NMR spectra in solution of the intermediates was  
accomplished. The coumarin derivative constitutes a member of an important  
class of sulfonylurea drugs with potential pharmacol. activity.  
IT 307524-67-0P 401630-98-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis and <sup>1</sup>H and <sup>13</sup>C NMR structural study of  
N-[4-[2-(2-oxo-2H-1-benzopyran-3-carboxamido)- and  
N-[4-[2-(4-nitrobenzamido)ethyl]benzensulfonyl]-N'-cyclohexylurea)  
RN 307524-67-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-phenylethyl)- (CA INDEX NAME)

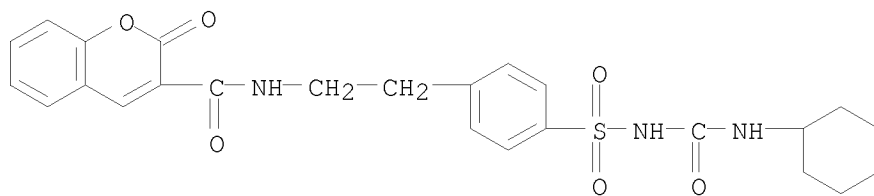


RN 401630-98-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(aminosulfonyl)phenyl]ethyl]-2-oxo-  
(CA INDEX NAME)

10/513699



IT 501100-56-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis and 1H and 13C NMR structural study of  
N-[4-[2-(2-oxo-2H-1-benzopyran-3-carboxamido)- and  
N-[4-[2-(4-nitrobenzamido)ethyl]benzenesulfonyl]-N'-cyclohexylurea)  
RN 501100-56-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-  
[[[(cyclohexylamino)carbonyl]amino]sulfonyl]phenyl]ethyl]-2-oxo- (CA  
INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 17 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:487577 CAPLUS

DOCUMENT NUMBER: 137:63420

TITLE: Preparation of lactone ketolide macrolide erythromycin antibiotics

INVENTOR(S): Andreotti, Daniele; Arista, Luca; Biondi, Stefano; Cardullo, Francesca; Damiani, Frederica; Lociuro, Sergio; Marchioro, Carla; Merlo, Giancarlo; Mingardi, Anna; Niccolai, Daniela; Paio, Alfredo; Piga, Elisabetta; Pozzan, Alfonso; Seri, Catia; Tarsi, Luca; Terreni, Silvia; Tibasco, Jessica

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

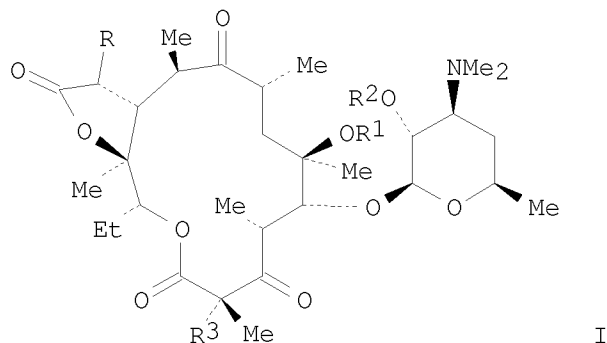
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050091	A1	20020627	WO 2001-GB5665	20011220 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2432429	A1	20020627	CA 2001-2432429	20011220 <--
AU 2002017277	A	20020701	AU 2002-17277	20011220 <--
EP 1363925	A1	20031126	EP 2001-271380	20011220
EP 1363925	B1	20061115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 2003002526	A2	20031128	HU 2003-2526	20011220
CN 1492874	A	20040428	CN 2001-822651	20011220
BR 2001016431	A	20040622	BR 2001-16431	20011220
JP 2004531471	T	20041014	JP 2002-551984	20011220
NZ 526450	A	20050429	NZ 2001-526450	20011220
AU 2002217277	B2	20050616	AU 2002-217277	20011220
AT 345350	T	20061215	AT 2001-271380	20011220
ES 2275621	T3	20070616	ES 2001-271380	20011220
IN 2003DN00933	A	20070420	IN 2003-DN933	20030616
ZA 2003004748	A	20040423	ZA 2003-4748	20030619
NO 2003002846	A	20030820	NO 2003-2846	20030620
MX 2003005668	A	20041203	MX 2003-5668	20030620
US 20040077557	A1	20040422	US 2003-450893	20031119
US 20050215495	A1	20050929	US 2005-127701	20050512
US 20060211636	A1	20060921	US 2006-422122	20060605
PRIORITY APPLN. INFO.:				
			GB 2000-31309	A 20001221
			GB 2001-26276	A 20011101
			GB 2001-26277	A 20011101
			WO 2001-GB5665	W 20011220
			US 2003-450893	B1 20031119

OTHER SOURCE(S) :  
GI

MARPAT 137:63420

US 2005-127701

A1 20050512



AB The present invention relates to lactone ketolides I wherein R is H, CN, substituted alkyl; R1 is alkyl, alkenyl; R2 is H, hydroxy protecting group; R3 is H, halogen, and pharmaceutically acceptable salts and solvates thereof, to process for their preparation and their use in therapy or prophylaxis of systemic or topical bacterial infections in a human or animal body. Thus, (11S,21R)-3-decladinosyl-11,12-dideoxy-6-O-methyl-3-oxo-12,11-[oxycarbonyl-(cyano)-methylene]erythromycin A was prepared and tested as antibacterial agent against *Streptococcus pneumoniae* and *Streptococcus pyogenes* (MIC  $\leq 1 \mu\text{g/mL}$ ).

IT 439104-43-5P 439104-57-1P  
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN  
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);  
PREP (Preparation); USES (Uses)  
(preparation of lactone ketolide macrolide erythromycin antibiotics and  
their use in therapy or prophylaxis of systemic or topical bacterial  
infections)

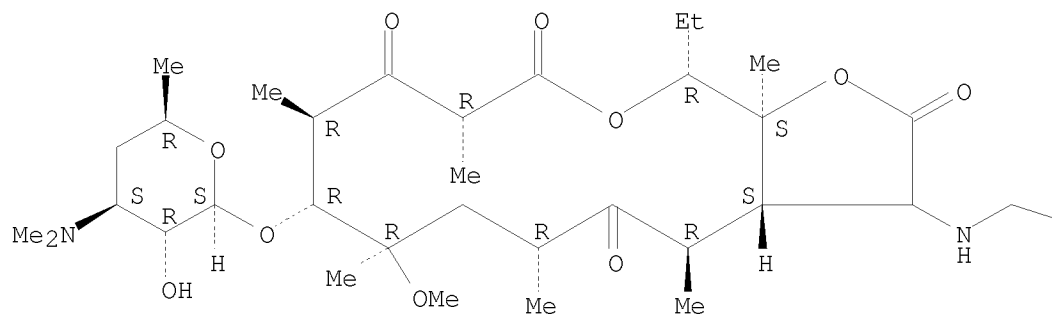
RN 439104-43-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[[(3aS,4R,6R,8R,9R,10R,12R,15R,15aS)-15-ethyltetradecahydro-8-methoxy-4,6,8,10,12,15a-hexamethyl-2,5,11,13-tetraoxo-9-[[3,4,6-trideoxy-3-(dimethylamino)-β-D-xylo-hexopyranosyl]oxy]-2H-furo[2,3-c]oxacyclotetradecin-3-yl]amino]ethyl]-6-nitro-2-oxo- (9CI) (CA INDEX NAME)

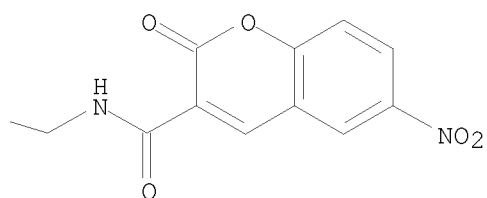
Absolute stereochemistry.



PAGE 1-A



PAGE 1-B

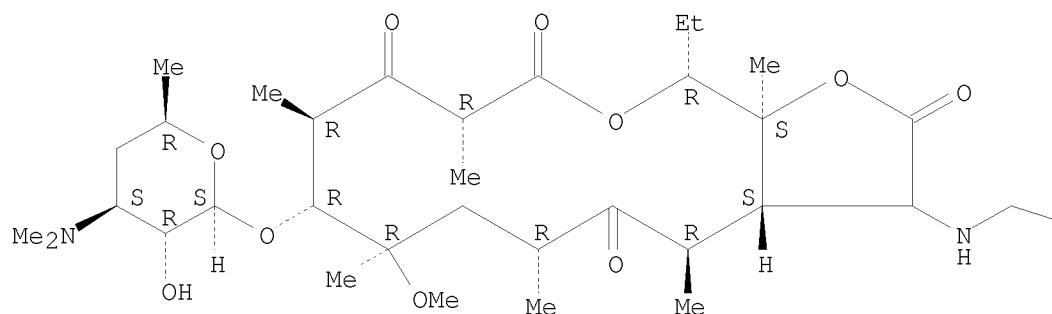


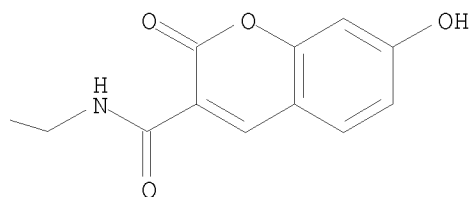
RN 439104-57-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[3,4,6-trideoxy-3-(dimethylamino)-β-D-xylohexopyranosyl]oxy]-2H-furo[2,3-c]oxacyclotetradecin-3-yl]amino]ethyl]-7-hydroxy-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





OS.CITING REF COUNT:	6	THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 18 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:484863 CAPLUS

DOCUMENT NUMBER: 137:47448

TITLE: Preparation of substituted phenylalaninol derivatives  
as protein tyrosine phosphatase inhibitorsINVENTOR(S): Larsen, Scott D.; May, Paul D.; Bleasdale, John E.;  
Liljebris, Charlotta; Schostarez, Heinrich Josef;  
Barf, Tjeerd; Nilsson, Marianne

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 144 pp., Cont.-in-part of U.S. Ser. No. 138,642.  
CODEN: USXXAM

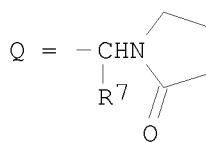
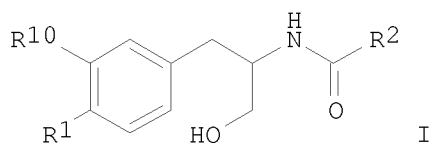
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6410585	B1	20020625	US 1999-265410	19990310 <--
US 6353023	B1	20020305	US 1998-138642	19980824 <--
CA 2366308	A1	20000914	CA 2000-2366308	20000309 <--
WO 2000053583	A1	20000914	WO 2000-US6022	20000309 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1161421	A1	20011212	EP 2000-917793	20000309 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002539115	T	20021119	JP 2000-604023	20000309 <--
AU 769511	B2	20040129	AU 2000-38711	20000309
PRIORITY APPLN. INFO.:				
			US 1997-57730P	P 19970828
			US 1998-138642	A2 19980824
			US 1999-265410	A 19990310
			WO 2000-US6022	W 20000309

OTHER SOURCE(S): MARPAT 137:47448  
GI

AB The invention comprises phenylalaninol derivs., e.g., I [R1 = OSO3H, OCH(CO2R5)2, OCH2CO2R5, OCH(CO2R5)CH2CO2R5, OC(CO2R5):CHCO2R5, CH2CH(CO2R5)2, CH:C(CO2R5)2, OCH2CONHOH, N(CH2CO2R5)2, OCHFCO2R5 (R5 = H, alkyl, alkylphenyl); R2 = CHR7NHR6, group Q (R6 = alkyl, alkyl-CONH2, alkyl-NHCO2R5, etc.; R7 = H, any group given for R6); R10 = H, CO2R5, CONHOH, 5-tetrazolyl, F, OCH2CO2R5], or their pharmaceutically acceptable

10/513699

salts, as small mol. weight, non-peptidic inhibitors of protein tyrosine phosphatase 1 (PTP1) which are useful for the treatment and/or prevention of non-insulin dependent diabetes mellitus. Thus, 5-[(2S)-2-[[[(2S)-2-[(tert-butoxycarbonyl)amino]-3-phenylpropanoyl]amino]-3-hydroxypropyl]-2-(carboxymethoxy)benzoic acid (claimed compound) was prepared and showed 80% inhibition of protein tyrosine phosphatase 1B at a concentration of 10  $\mu$ M.

IT 292834-83-4P

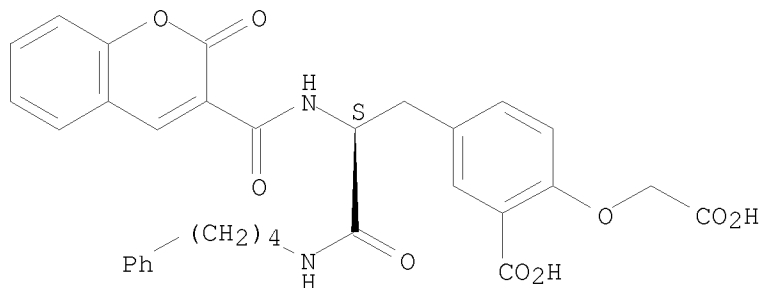
RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(preparation of substituted phenylalanine derivs. as protein tyrosine phosphatase inhibitors)

RN 292834-83-4 CAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-3-oxo-2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[(4-phenylbutyl)amino]propyl]- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 19 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:378541 CAPLUS

DOCUMENT NUMBER: 136:386402

TITLE: Preparation of alkenylamino acids as proteasome inhibitors

INVENTOR(S): Kono, Yasushi; Ando, Naoki; Sawada, Takayuki; Kudo, Shinji; Kuriyama, Kazuhiko; Iwanami, Akira

PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002145848	A	20020522	JP 2000-343930	20001110 <--
PRIORITY APPLN. INFO.:			JP 2000-343930	20001110

OTHER SOURCE(S): MARPAT 136:386402

AB A[NR1CHR2CO]mNHCHR3CONHCHR4CH:CR5R6 [A = Z, Boc, RCO, R(CO)2, RSO2; R = (un)substituted Ph, (un)substituted PhCH2, (un)substituted styryl, etc.; R1 = H; R1R2 may be linked to form pyrrolidine ring; R2-R4 = H, (un)substituted C1-4 alkyl, cyclohexylmethyl, (un)substituted PhCH2, etc.; R5 = H, F, C1-4 alkoxy carbonyl; R6 = C1-4 alkoxy carbonyl, CO2H, cyano, phenylsulfonyl, etc.; m = 0, 1], their pharmacol. acceptable salts, and their hydrates, useful as immunosuppressants, anti-inflammatory agents, antiallergy agents, anticancer agents, and nerve disorder-treating agents, are prepared by condensation of A[NR1CHR2CO]mNHCHR3CONHCHR4COH (A, R1-R4, m = same as above) with R7CHR8PO(OEt)2 (R7 = H, F; R8 = C1-4 alkoxy carbonyl, CO2H, C1-4 alkoxy phosphoryl, cyano, etc.) or R9CH2CO2Ra (R9 = C1-4 alkoxy carbonyl; Ra = C1-4 alkyl), followed by optional hydrolysis and further chemical modification. Thus, 150 mg MeSO2CH2PO(OEt)2 was treated with NaH in THF at room temperature for 1 h and condensed with 300 mg Z-L-Leu-L-Phe-L-Phe-H to give 89 mg Z-L-Leu-L-Phe-NH-L-CH(CH2Ph)CH:CHSO2Me, which inhibited proteasome with IC50 value of 0.14 µg/mL.

IT 428511-72-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of alkenylamino acids as proteasome inhibitors)

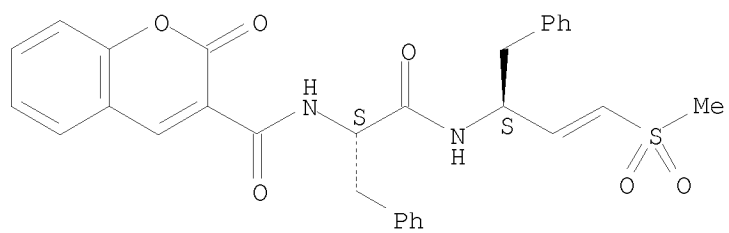
RN 428511-72-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[(1S)-2-[[ (1S)-3-(methylsulfonyl)-1-(phenylmethyl)-2-propen-1-yl]amino]-2-oxo-1-(phenylmethyl)ethyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

10/513699



<12/04/2007>

Erich Leese

L9 ANSWER 20 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:314042 CAPLUS

DOCUMENT NUMBER: 137:78925

TITLE: Design, synthesis and biological activity study on N-[4-(substituted phenyl)piperazine-1-yl]alkyl amide series as  $\alpha$ 1-adrenoceptor antagonists

AUTHOR(S): Fang, Hao; Xia, Lin; Jiang, Zhen-Zhou; Zhang, Wei; Zhang, Lu-Yong

CORPORATE SOURCE: Department of Medicinal Chemistry, China Pharmaceutical University, Nanjing, 210009, Peop. Rep. China

SOURCE: Huaxue Xuebao (2002), 60(4), 725-731  
CODEN: HHHPA4; ISSN: 0567-7351

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 137:78925

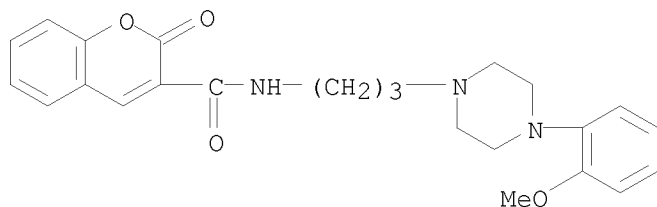
AB Novel furan-2-carboxylic acid { $\omega$ -[4-(substituted phenyl)-piperazine-1-yl]alkyl}amide and 2-oxo-2H-chromene-3-carboxylic acid { $\omega$ -[4-(substituted phenyl)piperazine-1-yl]alkyl}amide derivs. have been designed and synthesized based on the structure and activity relationship (SAR) of phenylpiperazine series as  $\alpha$ 1-adrenoceptor ( $\alpha$ 1-AR) antagonists and the results of computer-aided drug design we studied before. All the target compds. have been identified by <sup>1</sup>H NMR, IR and MS (HRMS). Preliminary bioassay suggests that most of the target compds. display good blocking activity to  $\alpha$ 1-AR. The potency (pA<sub>2</sub>) of compound N-{2-[4-(2-methoxyphenyl)piperazin-1-yl]ethyl}-2-furancarboxamide is higher than prazosin.

IT 440117-51-1P 440117-55-5P 440117-59-9P  
440117-63-5P 440117-66-8P 440117-68-0P  
440117-71-5P 440117-73-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and biol. activity of phenylpiperazinylalkyl amides as  $\alpha$ 1-adrenoceptor antagonists)

RN 440117-51-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propyl]-2-oxo-, hydrochloride (1:1) (CA INDEX NAME)

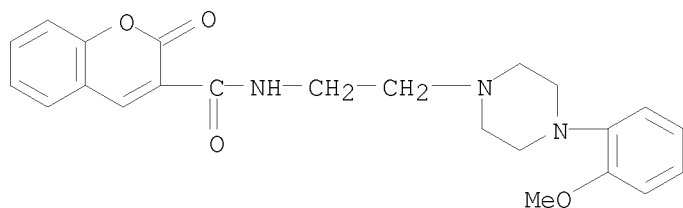


● HCl

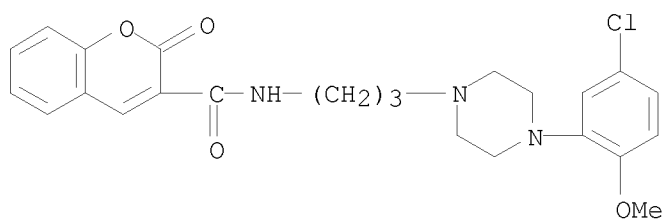
RN 440117-55-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-oxo- (CA INDEX NAME)

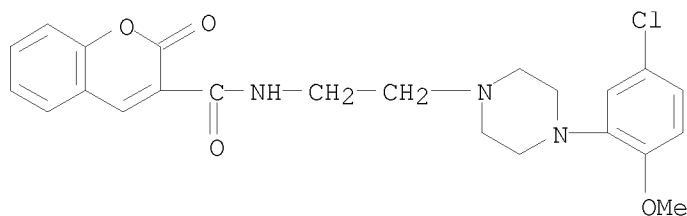
10/513699



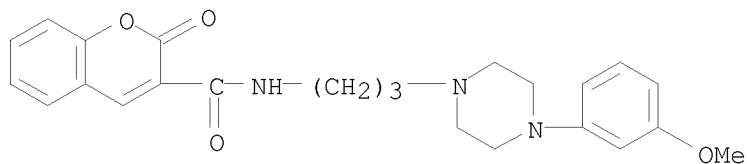
RN 440117-59-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[3-[4-(5-chloro-2-methoxyphenyl)-1-piperazinyl]propyl]-2-oxo- (CA INDEX NAME)



RN 440117-63-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(5-chloro-2-methoxyphenyl)-1-piperazinyl]ethyl]-2-oxo- (CA INDEX NAME)



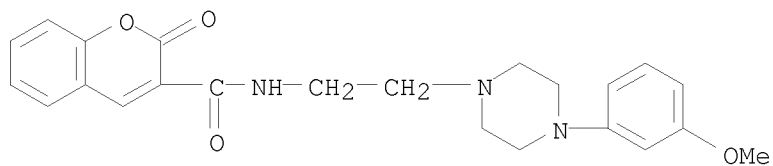
RN 440117-66-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[3-[4-(3-methoxyphenyl)-1-piperazinyl]propyl]-2-oxo- (CA INDEX NAME)



RN 440117-68-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(3-methoxyphenyl)-1-piperazinyl]ethyl]-2-oxo- (CA INDEX NAME)

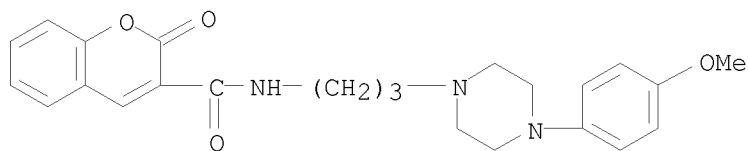


10/513699



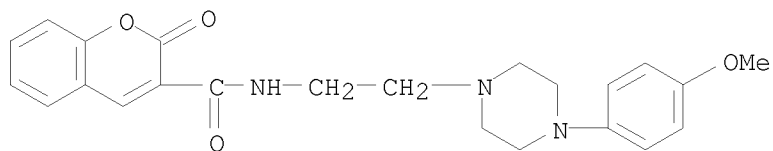
RN 440117-71-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[4-(4-methoxyphenyl)-1-piperazinyl]propyl]-2-oxo- (CA INDEX NAME)



RN 440117-73-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(4-methoxyphenyl)-1-piperazinyl]ethyl]-2-oxo- (CA INDEX NAME)



10/513699

L9 ANSWER 21 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:275953 CAPLUS

DOCUMENT NUMBER: 136:309851

TITLE: Preparation of diphenylamines and  
N-nitrosodiphenylamines for treatment of oxidative  
stress and unavailability of endothelial nitric oxide.

INVENTOR(S): Lardy, Claude; Nioche, Jean-Yves; Caputo, Lidia;  
Decerprit, Jacques; Ortholand, Jean-Yves; Festal,  
Didier; Guerrier, Daniel

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

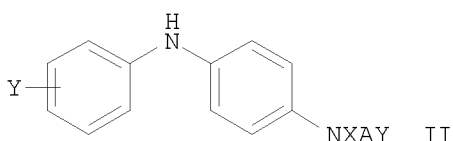
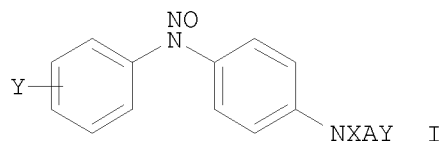
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2002028820	A1	20020411	WO 2001-EP10761	20010918 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,				
UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2815030	A1	20020412	FR 2000-12749	20001005 <--
CA 2424684	A1	20020411	CA 2001-2424684	20010918 <--
AU 2001089891	A	20020415	AU 2001-89891	20010918 <--
BR 2001014252	A	20030701	BR 2001-14252	20010918
EP 1322598	A1	20030702	EP 2001-969732	20010918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 2003002771	A2	20031229	HU 2003-2771	20010918
JP 2004521866	T	20040722	JP 2002-532407	20010918
US 20040063783	A1	20040401	US 2003-398238	20030403
NO 2003001533	A	20030404	NO 2003-1533	20030404
MX 2003002999	A	20030714	MX 2003-2999	20030404
ZA 2003003369	A	20040730	ZA 2003-3369	20030430
IN 2003KN00563	A	20050121	IN 2003-KN563	20030502
PRIORITY APPLN. INFO.:			FR 2000-12749	A 20001005
			WO 2001-EP10761	W 20010918

OTHER SOURCE(S): MARPAT 136:309851

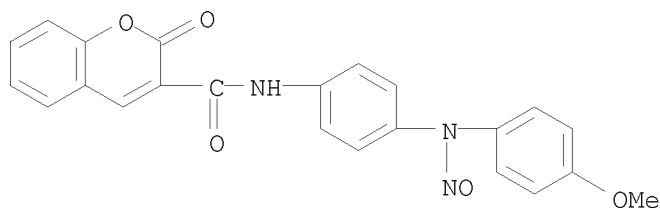
GI



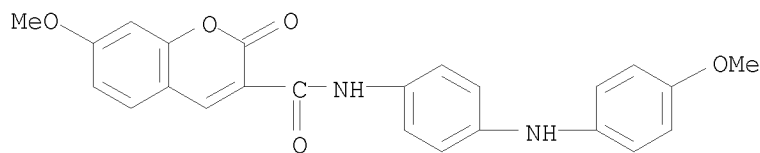
AB Title compds. [I; X, Ra = H, (unsatd.) alipharyl, AY; A = CO, SO<sub>2</sub>, CONRa, CONRaSO<sub>2</sub>; T = H, halo, NO<sub>2</sub>, cyano, (unsatd.) (halogenated) alipharyl optionally interrupted by O and/or S; Y = organic substituent; with provisos], and des-nitroso compds. (II; variables as above), were prepared Thus, a mixture of nicotinoyl chloride hydrochloride, 4-amino-4'-methoxy-N-tert-butoxycarbonyldiphenylamine, and Et<sub>3</sub>N was stirred in CH<sub>2</sub>Cl<sub>2</sub> to give 100% 4-nicotinoylamino derivative which was N-deprotected with CF<sub>3</sub>CO<sub>2</sub>H to give 95.2% 4-methoxy-4'-nicotinoylamino-diphenylamine. The latter in HOAc was treated dropwise with aqueous NaNO<sub>2</sub> to give 88% N-nitroso-4-methoxy-4'-nicotinoylamino-diphenylamine. Tested II inhibited oxidation of human low mol. weight lipoproteins by Cu<sup>2+</sup> with IC<sub>50</sub> = 1.7-13.4  $\mu$ M.

IT 409353-19-1P 409356-26-9P  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of diphenylamines and N-nitrosodiphenylamines for treatment of oxidative stress and unavailability of endothelial nitric oxide)

RN 409353-19-1 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(4-methoxyphenyl)nitrosoamino]phenyl]-2-oxo- (CA INDEX NAME)



RN 409356-26-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-N-[4-[(4-methoxyphenyl)amino]phenyl]-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)  
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 22 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:215686 CAPLUS

DOCUMENT NUMBER: 137:288515

TITLE: Study on HCMV protease inhibitors (II) design and synthesis of heterocyclic inhibitors

AUTHOR(S): Xu, Ping; Zhang, Xin; Zhang, Huaning

CORPORATE SOURCE: Department of Medicinal Chemistry, School of Pharmaceutical Sciences, Peking University, Beijing, 100083, Peop. Rep. China

SOURCE: Zhongguo Yaowu Huaxue Zazhi (2002), 12(1), 13-16

CODEN: ZYHZEJ; ISSN: 1005-0108

PUBLISHER: Zhongguo Yaowu Huaxue Zazhi Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The human cytomegalovirus (HCMV) is a member of the herpesvirus family infecting 40%-80% of the general population. HCMV can cause fatal infections in immunocompromised individuals. HCMV encodes a serine protease that is essential for viral replication and is a potential target for antiviral drug development. The heterocyclic HCMV protease inhibitors were studied. A series of heterocyclic compds. were selected for HCMV protease inhibitor by searching the MDDR library with the Docking approach based on the crystal structure data of HCMV protease and its peptidomimetic inhibitor complex. From the list, compds. 2-(coumarin-3-yl)-5-fluoro-4H-3,1-benzoxazin-4-one (I) and 3-(2-hydroxy-4-methylbenzoyl)-2-(4-methoxy-phenyl)-2,3-dihydro-isoindol-1-one (II) were synthesized and tested first. Cyclocondensation of salicylic aldehyde with di-Et malonate gave Et coumarin-3-carboxylate (1), which was changed to coumarin-3-carbonyl chloride (3) by hydrolysis and then chlorination. Compound 3 condensed with 2-amino-6-fluorobenzoic acid to produce compound I. 3-Methyl-phenol condensed with ninhydrin and then reacted with 4-amino-anisole to give compound II. The structures of the product were confirmed by MS, IR, <sup>1</sup>H- NMR spectra and C, H, N elemental anal.

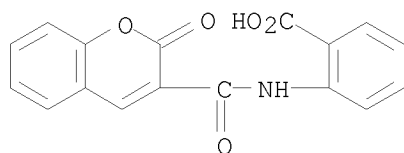
IT 73877-78-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(HCMV protease inhibitors (II) design and synthesis of heterocyclic inhibitors)

RN 73877-78-8 CAPLUS

CN Benzoic acid, 2-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



L9 ANSWER 23 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:212210 CAPLUS

DOCUMENT NUMBER: 136:395325

TITLE: Structure-Activity Relationships of Methoctramine-Related Polyamines as Muscular Nicotinic Receptor Noncompetitive Antagonists. 2.1 Role of Polymethylene Chain Lengths Separating Amine Functions and of Substituents on the Terminal Nitrogen Atoms

AUTHOR(S): Rosini, Michela; Bixel, M. Gabriele; Marucci, Gabriella; Budriesi, Roberta; Krauss, Michael; Bolognesi, Maria L.; Minarini, Anna; Tumiatti, Vincenzo; Hucho, Ferdinand; Melchiorre, Carlo  
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Bologna, Bologna, 40126, Italy

SOURCE: Journal of Medicinal Chemistry (2002), 45(9), 1860-1878

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:395325

AB Polymethylene tetraamine methoctramine is a prototypical antimuscarinic ligand endowed with a significant affinity for muscular nicotinic acetylcholine receptors (nAChRs). Thus, according to the universal template approach, structural modifications were performed on methoctramine to improve affinity and selectivity for the muscle-type nAChR. The polyamine derivs. synthesized were tested at both frog rectus and Torpedo nAChRs and at guinea pig left atria (M2) and ileum longitudinal muscle (M3) muscarinic acetylcholine receptors (mAChRs). All of the compds., like prototype methoctramine, were noncompetitive antagonists of nicotinic receptors while being competitive antagonists at M2 and M3 mAChRs. The biol. profile of polyamines revealed that increasing the number of amine functions and the chain length separating these nitrogen atoms led to a significant improvement in potency at nAChRs. Moreover, the role of the number and type of amine functions in the interaction with nAChRs was further investigated. Several tetraamines bearing a rather rigid spacer between the nitrogen atoms instead of the very flexible polymethylene chain, displayed a profile similar to that of methoctramine at nAChRs, whereas a significant decrease in potency was observed at mAChRs. The tetraamine bearing a 2-methoxyphenethyl group was less potent than methoctramine, whereas the tetraamine carrying a diphenylethyl moiety was more potent than methoctramine, confirming that an increase in size of the hydrophobic group on the terminal nitrogen atoms increases significantly the binding affinity for nAChRs. Unsym. hybrid tetraamines were significantly more potent than the prototype philanthotoxin at both frog rectus and Torpedo nAChRs, confirming that an increase in the distance between the amine functions results in a parallel increase in the affinity for nAChRs. To gain insight into the mode of interaction of polymethylene tetraamines with nAChRs, photolabile and fluorescent compds. were synthesized. A most intriguing finding was the observation that the compound which bears two identical azido groups on the terminal nitrogen atoms was found to bind the Torpedo nAChR with a 1:1 stoichiometry, suggesting a U-shaped conformation in the receptor interaction. Moreover, the high potency shown by the fluorescent compds. appears promising for a further characterization of the polymethylene tetraamines binding site with the muscle-type nAChR.

IT 428880-30-2P 428880-40-4P

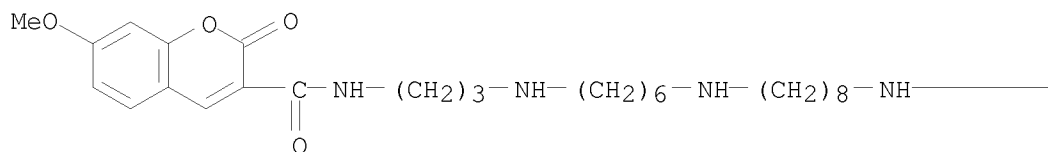
10/513699

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL  
(Biological study); PREP (Preparation)  
(structure-activity relationships of methoctramine polyamines as  
muscular nicotinic receptor noncompetitive antagonists in relation to  
polymethylene chain lengths and terminal nitrogen substituents)

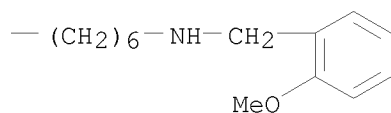
RN 428880-30-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-N-[28-(2-methoxyphenyl)-  
4,11,20,27-tetraazaoctacos-1-yl]-2-oxo- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 428880-40-4 CAPLUS

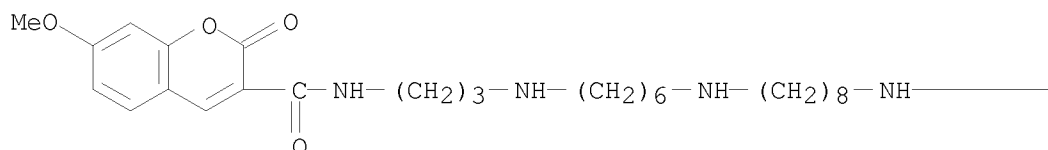
CN 2H-1-Benzopyran-3-carboxamide, N-[28-(5-iodo-2-methoxyphenyl)-4,11,20,27-  
tetraazaoctacos-1-yl]-7-methoxy-2-oxo-, 2,2,2-trifluoroacetate (1:4) (CA  
INDEX NAME)

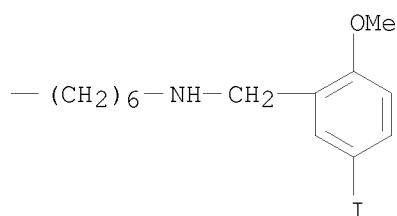
CM 1

CRN 428880-39-1

CMF C42 H66 I N5 O5

PAGE 1-A

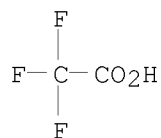




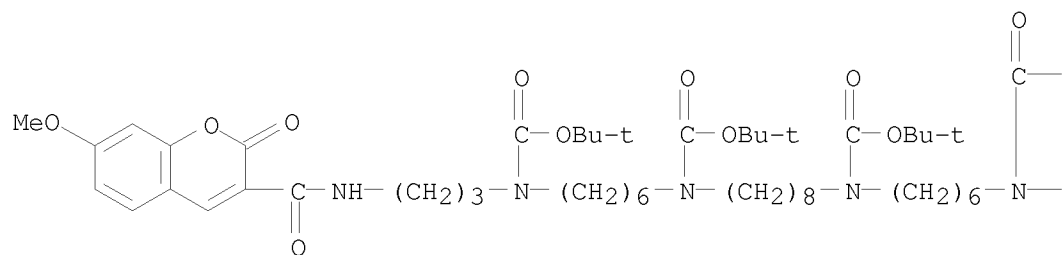
CM 2

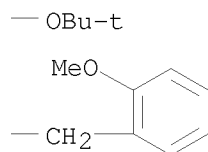
CRN 76-05-1

CMF C2 H F3 O2



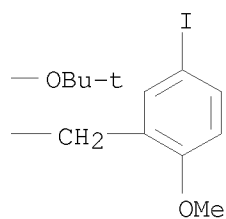
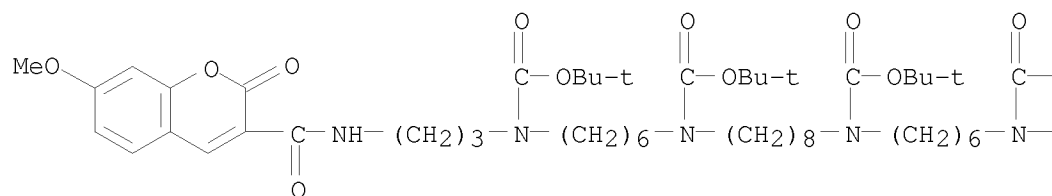
IT 428880-29-9P 428880-38-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (structure-activity relationships of methoctramine polyamines as muscular nicotinic receptor noncompetitive antagonists in relation to polymethylene chain lengths and terminal nitrogen substituents)  
 RN 428880-29-9 CAPLUS  
 CN 31-Oxa-2,6,13,22,29-pentaazatritriacontane-6,13,22-tricarboxylic acid, 1-(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)-29-[(2-methoxyphenyl)methyl]-32,32-dimethyl-1,30-dioxo-, 6,13,22-tris(1,1-dimethylethyl) ester (CA INDEX NAME)





RN 428880-38-0 CAPLUS

CN 31-Oxa-2,6,13,22,29-pentaazatritriacontane-6,13,22-tricarboxylic acid,  
29-[(5-iodo-2-methoxyphenyl)methyl]-1-(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)-32,32-dimethyl-1,30-dioxo-, 6,13,22-tris(1,1-dimethylethyl) ester (CA  
INDEX NAME)

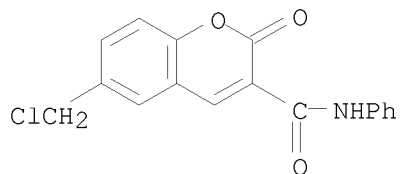


OS.CITING REF COUNT:	10	THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT:	40	THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



10/513699

L9 ANSWER 24 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:211242 CAPLUS  
DOCUMENT NUMBER: 137:241666  
TITLE: Structural approach of the mechanism of inhibition of  
 $\alpha$ -chymotrypsin by coumarins  
AUTHOR(S): Wouters, Johan; Huygens, Marjorie; Pochet, Lionel;  
Pirotte, Bernard; Durant, Francois; Masereel, Bernard  
CORPORATE SOURCE: Laboratoire de Chimie Moléculaire Structurale,  
Facultés Universitaires N.-D. de la Paix, Namur,  
B-5000, Belg.  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2002  
, 12(7), 1109-1112  
CODEN: BMCLE8; ISSN: 0960-894X  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A pharmacophore associated to the inhibition of  $\alpha$ -chymotrypsin has been  
built based on the structural and electronic characterization of a series  
of coumarin derivs.  
IT 176770-48-2  
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PRP  
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Structural approach of the mechanism of inhibition of  
 $\alpha$ -chymotrypsin by coumarins)  
RN 176770-48-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-phenyl- (CA INDEX  
NAME)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)  
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 25 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:90336 CAPLUS  
DOCUMENT NUMBER: 136:147469  
TITLE: Ion channel assay methods using electrical stimulation  
INVENTOR(S): Maher, Michael P.; Gonzalez, Jesus E., III  
PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA  
SOURCE: PCT Int. Appl., 146 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002008748	A2	20020131	WO 2001-US21652	20010709 <--
WO 2002008748	A3	20020502		
WO 2002008748	A9	20030612		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 20020025573	A1	20020228	US 2001-804458	20010312 <--
US 6969449	B2	20051129		
US 20020025568	A1	20020228	US 2001-804480	20010312 <--
US 7312043	B2	20071225		
US 20020028480	A1	20020307	US 2001-804580	20010312 <--
US 6686193	B2	20040203		
US 7399599	B2	20080715	US 2001-804457	20010312 <--
US 20020045159	A1	20020418		
CA 2413711	A1	20020131	CA 2001-2413711	20010709 <--
EP 1303757	A2	20030423	EP 2001-953433	20010709
EP 1303757	B1	20061011		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004514115	T	20040513	JP 2002-514391	20010709
AU 2001275881	B2	20060406	AU 2001-275881	20010709
ES 2273868	T3	20070516	ES 2001-953433	20010709
MX 2003JL00001	A	20040209	MX 2003-JL1	20030110
US 20040180426	A1	20040916	US 2004-770861	20040202
US 7176016	B2	20070213		
US 20040191757	A1	20040930	US 2004-771283	20040202
US 20060216689	A1	20060928	US 2006-443721	20060531
US 7615357	B2	20091110		
US 20060216690	A1	20060928	US 2006-444187	20060531
AU 2006202851	A1	20060727	AU 2006-202851	20060704
AU 2006202851	B2	20090604		
PRIORITY APPLN. INFO.:			US 2000-217219P	P 20000710
			US 2000-217221P	P 20000710
			US 2000-217666P	P 20000710
			US 2000-217671P	P 20000710

<12/04/2007>

Erich Leese

US 2001-804457	A	20010312
US 2001-804458	A	20010312
US 2001-804480	A	20010312
US 2001-804580	A	20010312
AU 2001-275881	A3	20010709
WO 2001-US21652	W	20010709

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method of characterizing the biol. activity of a candidate compound may include exposing cells to the candidate compound, and then exposing the cells to a repetitive application of elec. fields so as to set the transmembrane potential to a level corresponding to a pre-selected voltage dependent state of a target ion channel. Adherent RBL cells, endogenously expressing the potassium inward rectifier channel IRK1, were seeded into 96-well plates and loaded with FRET dyes. Three rows of wells contained 400  $\mu$ M barium chloride to block the IRK1 channel. The plates were analyzed using a VIPR reader while being elec. stimulated with a biphasic stimulus train repeated at a frequency of 50 Hz and with a 5 ms/phase pulse duration.

IT 393782-57-5

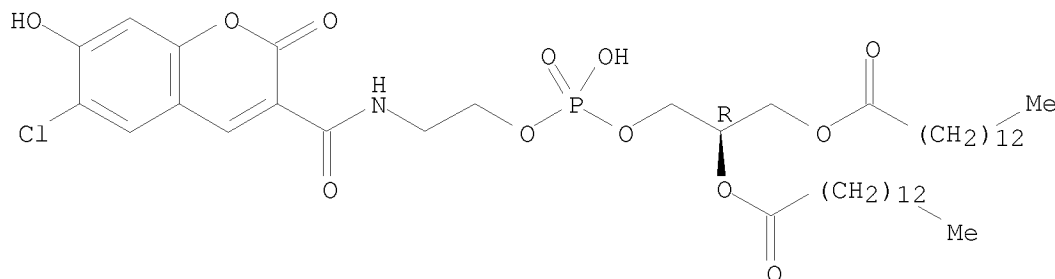
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(ion channel assay methods using elec. stimulation)

RN 393782-57-5 CAPLUS

CN Tetradecanoic acid, 1,1'-[(1R)-1-[8-(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)-3-hydroxy-3-oxido-8-oxo-2,4-dioxo-7-aza-3-phosphaoct-1-yl]-1,2-ethanediyl] ester (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT:	22	THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)
REFERENCE COUNT:	1	THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 26 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:89041 CAPLUS

DOCUMENT NUMBER: 136:386093

TITLE: Solid-phase synthesis of  $\alpha$ -substituted  
3-bisarylthio N-Hydroxy propionamides as Specific MMP  
InhibitorsAUTHOR(S): Chollet, Anne-Marie; Le Diguarher, Thierry;  
Kucharczyk, Nathalie; Loynel, Armelle; Bertrand, Marc;  
Tucker, Gordon; Guilbaud, Nicolas; Burbridge, Mike;  
Pastoureau, Philippe; Fradin, Armel; Sabatini,  
Massimo; Fauchere, Jean-Luc; Casara, Patrick  
CORPORATE SOURCE: Institut de Recherches Servier, Croissy sur Seine,  
78290, Fr.SOURCE: Bioorganic & Medicinal Chemistry (2002),  
10(3), 531-544

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:386093

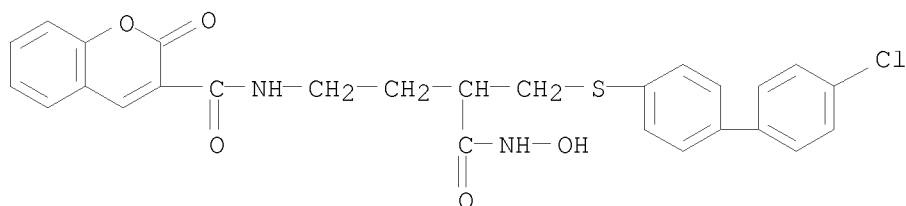
AB A novel series of potent and specific MMP-2,3,9,13 inhibitors has been obtained by modulation on solid phase by  $\alpha$  and aryl substitutions on 3-arylthio-N-hydroxy-propionamides starting from itaconic acid. Example compds. thus prepared and evaluated included  $\alpha$ -[[[1,1'-biphenyl]-4-ylthio)methyl]-N-hydroxy-4-oxo-1,2,3-benzotriazine-3(4H)-butanamide, and derivs. and analogs thereof, such as  $\alpha$ -[[[4'-chloro[1,1'-biphenyl]-4-yl)thio)methyl]-N-hydroxy-4-oxo-1,2,3-benzotriazine-3(4H)-butanamide, N-hydroxy-4-oxo- $\alpha$ -[[[4-(3-thienyl)phenyl]thio)methyl]-1,2,3-benzotriazine-3(4H)-butanamide, N-hydroxy-4-oxo- $\alpha$ -[[[4-(3-pyridinyl)phenyl]thio)methyl]-1,2,3-benzotriazine-3(4H)-butanamide, N-hydroxy-4-oxo- $\alpha$ -[[[4-(5-pyrimidinyl)phenyl]thio)methyl]-1,2,3-benzotriazine-3(4H)-butanamide,  $\alpha$ -[[[4'-chloro[1,1'-biphenyl]-4-yl)thio)methyl]-N-hydroxy-2H-isoindole-2-butanamide,  $\alpha$ -[[[4'-chloro[1,1'-biphenyl]-4-yl)thio)methyl]-N-hydroxy-4-oxo-3(4H)-quinazolinebutanamide, etc.

IT 427895-59-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of 2-[[[4'-chloro-[1,1-biphenyl]-4-yl]thio)methyl]-N-hydroxybutanamide derivs. as specific metalloproteinase inhibitors)

RN 427895-59-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[[[4'-chloro[1,1'-biphenyl]-4-yl)thio)methyl]-4-(hydroxyamino)-4-oxobutyl]-2-oxo- (CA INDEX NAME)



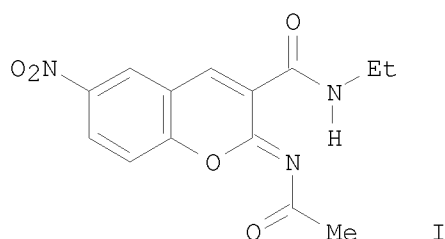
OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS  
RECORD (21 CITINGS)

10/513699

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

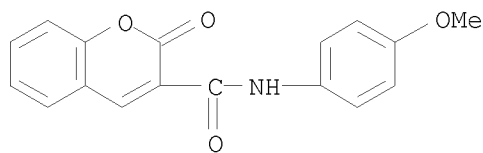
L9 ANSWER 27 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:70608 CAPLUS  
DOCUMENT NUMBER: 136:309779  
TITLE: Synthesis and antimicrobial activity of  
2-iminocoumarin-3-carboxylic acid amides  
AUTHOR(S): Ukhov, S. V.; Kon'shin, M. E.; Odegova, T. F.  
CORPORATE SOURCE: State Pharmaceutical Academy, Perm, Russia  
SOURCE: Pharmaceutical Chemistry Journal (Translation of  
Khimiko-Farmatsevticheskii Zhurnal) (2001),  
35(7), 364-365  
CODEN: PCJOAU; ISSN: 0091-150X  
PUBLISHER: Kluwer Academic/Consultants Bureau  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:309779  
GI



AB A series of 2-iminocoumarin-3-carboxylic acid amides, e.g. I, were prepared and evaluated for antimicrobial activity. It was established that all the synthesized compds. possess antimicrobial properties with respect to both *St. aureus* and *E. coli*. The most active substances significantly exceed ethacridine in the bacteriostatic effect.

IT 1846-94-2P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and antimicrobial activity of 2-iminocoumarin-3-carboxylic acid amides)

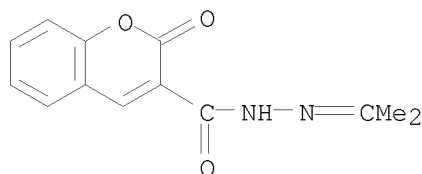
RN 1846-94-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 28 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:53911 CAPLUS  
DOCUMENT NUMBER: 136:309621  
TITLE: Spectral analysis of amide conformers (s-cis and s-trans) of N-isopropylidenehydrazinocarbonyl derivatives  
AUTHOR(S): O'Callaghan, Conor N.; McMurry, T. Brian H.; O'Brien, John E.  
CORPORATE SOURCE: Univ. Chem. Lab., Trinity Coll., Dublin, Ire.  
SOURCE: Journal of Chemical Research, Synopses (2001), (11), 453-456, 1101-1104  
CODEN: JRPSDC; ISSN: 0308-2342  
PUBLISHER: Science Reviews  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB New N-isopropylidenehydrazinocarbonyl derivs. and other, related compds. display in solution two sets of characteristic NMR signals which are attributable to the presence of s-cis and s-trans conformers; the conformations are established by extensive NMR expts.  
IT 204185-63-7  
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
(NMR spectral anal. of amide conformers (s-cis and s-trans) of N-isopropylidenehydrazinocarbonyl derivs.)  
RN 204185-63-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(1-methylethylidene)hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 29 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:31485 CAPLUS

DOCUMENT NUMBER: 136:86058

TITLE: Preparation of aplidine analogs as new antitumor agents

INVENTOR(S): Rodriguez, Ignacio; Polanco, Concepcion; Cuevas, Felix; Mandez, Paloma; Cuevas, Carmen; Gallego, Pilar; Munt, Simon; Manzanares, Ignacio

PATENT ASSIGNEE(S): Pharma Mar, S.A., Spain

SOURCE: PCT Int. Appl., 241 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002596	A2	20020110	WO 2001-GB2901	20010702 <--
WO 2002002596	A3	20020523		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2414609	A1	20020110	CA 2001-2414609	20010702 <--
EP 1294747	A2	20030326	EP 2001-945484	20010702
EP 1294747	B1	20080430		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
BR 2001012375	A	20030624	BR 2001-12375	20010702
HU 2003001387	A2	20030828	HU 2003-1387	20010702
HU 2003001387	A3	20050428		
CN 1449408	A	20031015	CN 2001-814701	20010702
JP 2004502702	T	20040129	JP 2002-507848	20010702
NZ 523367	A	20041224	NZ 2001-523367	20010702
RU 2299887	C2	20070527	RU 2003-102633	20010702
AT 393775	T	20080515	AT 2001-945484	20010702
PT 1294747	E	20080808	PT 2001-945484	20010702
ES 2305083	T3	20081101	ES 2001-945484	20010702
CN 101575363	A	20091111	CN 2008-10183709	20010702
MX 2003000202	A	20031015	MX 2003-202	20021219
IN 2002DN01291	A	20090313	IN 2002-DN1291	20021226
NO 2002006242	A	20030227	NO 2002-6242	20021227
KR 866056	B1	20081030	KR 2002-718030	20021230
ZA 2003000169	A	20040407	ZA 2003-169	20030107
HK 1052940	A1	20081024	HK 2003-105236	20030721
US 20040097413	A1	20040520	US 2003-312341	20030728
US 7348310	B2	20080325		
US 20080009435	A1	20080110	US 2007-788866	20070420
PRIORITY APPLN. INFO.:			GB 2000-16148	A 20000630
			GB 2001-3750	A 20010215
			CN 2001-814701	A3 20010702



WO 2001-GB2901

W 20010702

US 2003-312341

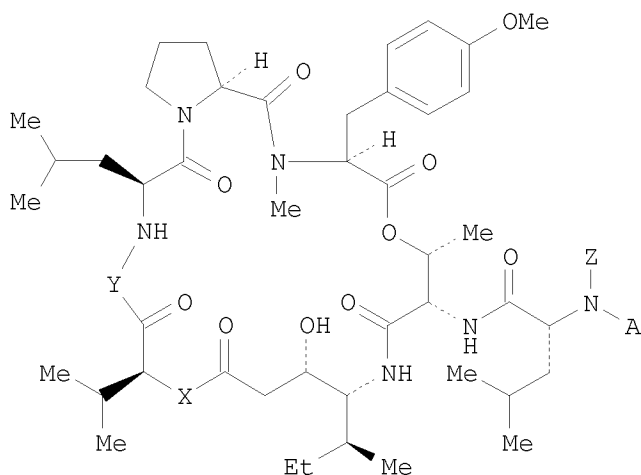
A1 20030728

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S):

CASREACT 136:86058; MARPAT 136:86058

GI



I

AB Aplidine and its analogs I [X = CH<sub>2</sub>, O, S, or NR<sub>1</sub>, where R<sub>1</sub> = H, (un)substituted alkyl, alkenyl, aryl, aralkyl; Y = (COR<sub>2</sub>)<sub>n</sub>CO, where n = 0 or 1, R<sub>2</sub> = (un)substituted alkyl, alkenyl, aryl, aralkyl; Z = H, or R<sub>3</sub>CONH, R<sub>3</sub>CO, where R<sub>3</sub> = (un)substituted alkyl, alkenyl, aryl, aralkyl; A = amino acyl, R<sub>3</sub>SO<sub>2</sub>, or R<sub>3</sub>CO, where R<sub>3</sub> = (un)substituted alkyl, aryl, aralkyl] were prepared as antitumor agents. Thus, [Val]<sub>3</sub>[Isobutyryl]<sub>8</sub>-didemnin A was prepared by multistep procedure starting from reaction of H-Leu-Pro-OCH<sub>2</sub>Ph with Boc-Val-OH (Boc = tert-butoxycarbonyl) and via coupling of Ist-Val-Leu-Pro-OBn (Ist = isostatine) intermediate with O-(Cbz-N,O-dimethyl-Tyr)-N-tert-Boc-Thr phenacyl ester (Cbz = benzyloxycarbonyl), followed by macrocyclization and coupling with Cbz-Me-D-Leu and Pyr-Pro-OH. The prepared compound was active against human lung carcinoma and human colon carcinoma.

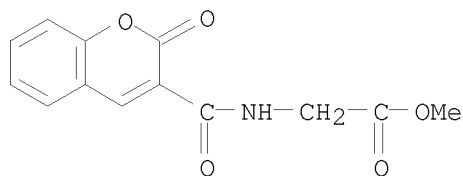
IT 56159-50-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of aplidine analogs as antitumor agents)

RN 56159-50-3 CAPLUS

CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

10/513699



IT 387823-89-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

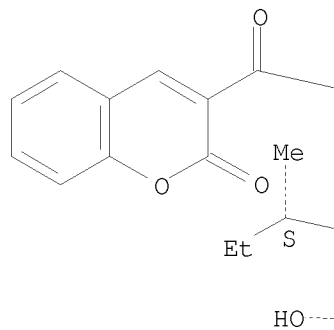
(preparation of aplidine analogs as antitumor agents)

RN 387823-89-4 CAPLUS

CN L-Tyrosine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]glycyl-N-methyl-D-leucyl-L-threonyl-(3S,4R,5S)-4-amino-3-hydroxy-5-methylheptanoyl-(2S,4S)-4-hydroxy-2,5-dimethyl-3-oxohexanoyl-L-leucyl-L-prolyl-N,O-dimethyl-, (8→3)-lactone (9CI) (CA INDEX NAME)

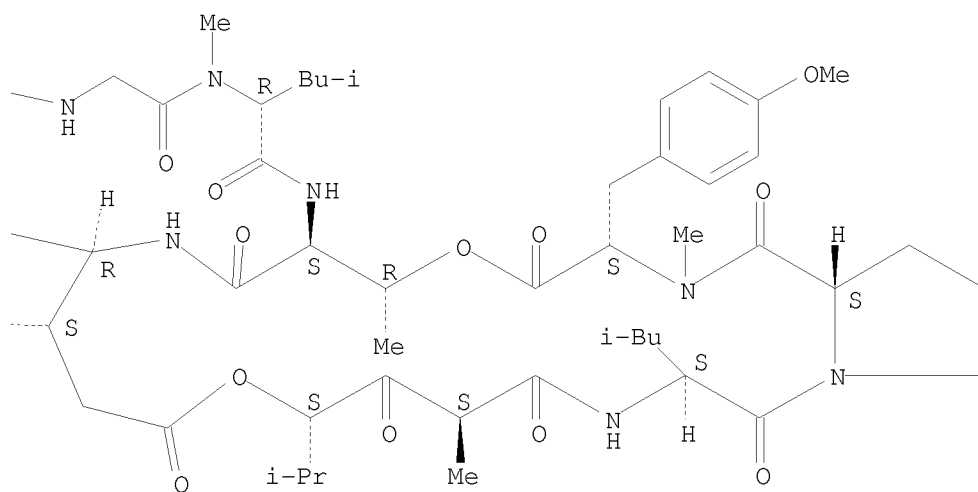
Absolute stereochemistry.

PAGE 1-A

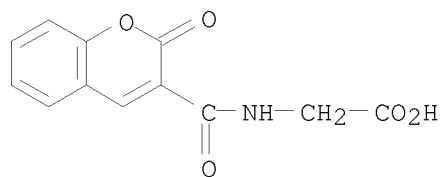


<12/04/2007>

Erich Leese



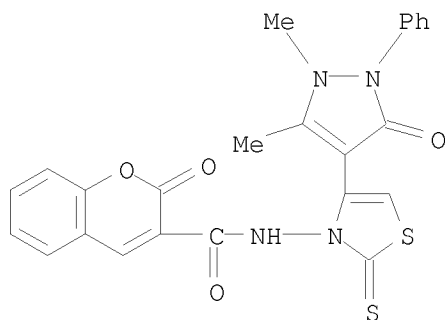
IT 57601-45-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of aplidine analogs as antitumor agents)  
 RN 57601-45-3 CAPLUS  
 CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
 (4 CITINGS)  
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

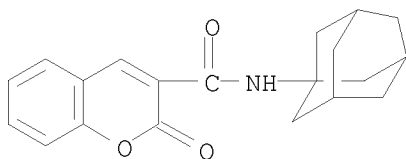
L9 ANSWER 30 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:29695 CAPLUS  
DOCUMENT NUMBER: 136:325480  
TITLE: Novel synthesis of thiazole, coumarin, pyridine,  
thiophene and thieno[2,3-b]pyridine derivatives  
AUTHOR(S): El-Taweel, F. M. A.; Elagamey, A. A.; El-Kenawy, A.  
A.; Waly, M. A.  
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Mansoura  
University, New Damietta, Egypt  
SOURCE: Phosphorus, Sulfur and Silicon and the Related  
Elements (2001), 176, 215-225  
CODEN: PSSLEC; ISSN: 1042-6507  
PUBLISHER: Gordon & Breach Science Publishers  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:325480  
AB Several new thiazole, coumarin, pyridine, thiophene, and thienopyridines  
were prepared from 4-chloroacetylantipyrine and activated nitriles as  
starting materials.  
IT 413570-79-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of thiazole, coumarin, pyridine, thiophene, and  
thieno[2,3-b]pyridine derivs.)  
RN 413570-79-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2,3-dihydro-1,5-dimethyl-3-oxo-2-  
phenyl-1H-pyrazol-4-yl)-2-thioxo-3(2H)-thiazolyl]-2-oxo- (CA INDEX NAME)



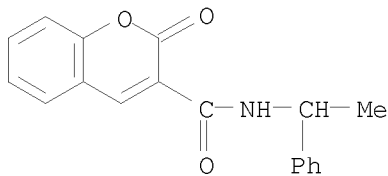
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)  
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 31 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:906457 CAPLUS  
DOCUMENT NUMBER: 136:199892  
TITLE: <sup>1</sup>H and <sup>13</sup>C NMR assignments of  
2-oxo-2H-1-benzopyran-3-acyl and -3-amide derivatives  
AUTHOR(S): Martinez-Martinez, F. J.; Padilla-Martinez, I. I.;  
Trujillo-Ferrara, J.  
CORPORATE SOURCE: Departamento de Quimica, Unidad Profesional  
Interdisciplinaria de Biotecnologia del IPN, Mexico,  
07340, Mex.  
SOURCE: Magnetic Resonance in Chemistry (2001),  
39(12), 765-767  
CODEN: MRCHEG; ISSN: 0749-1581  
PUBLISHER: John Wiley & Sons Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB <sup>1</sup>H and <sup>13</sup>C NMR spectral data for seven 2-oxo-2H-1-benzopyran-3-carboxamide  
and two 2-oxo-2H-1-benzopyran-3-amide derivs. are reported. The chemical  
shift assignments were based on two-dimensional expts.  
IT 302952-33-6 304887-47-6 307524-67-0  
401630-98-6 401631-00-3  
RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation,  
nonpreparative)  
(<sup>1</sup>H and <sup>13</sup>C NMR assignments of 2-oxo-2H-1-benzopyran-3-acyl and  
-3-amide derivs.)  
RN 302952-33-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl- (CA  
INDEX NAME)

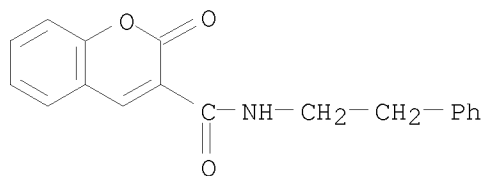


RN 304887-47-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(1-phenylethyl)- (CA INDEX NAME)



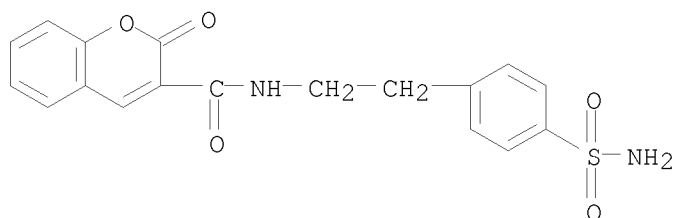
RN 307524-67-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-phenylethyl)- (CA INDEX NAME)

10/513699



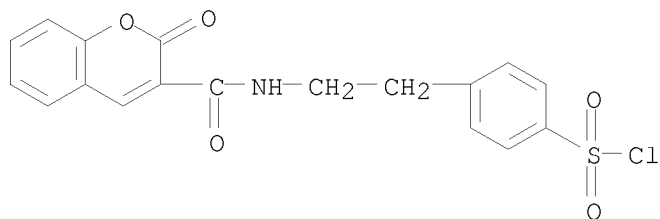
RN 401630-98-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(aminosulfonyl)phenyl]ethyl]-2-oxo-  
(CA INDEX NAME)



RN 401631-00-3 CAPLUS

CN Benzenesulfonyl chloride, 4-[2-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD  
(8 CITINGS)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 32 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:904573 CAPLUS

DOCUMENT NUMBER: 136:50647

TITLE: A protein fragment complementation assay (PCA) for the detection of protein-protein, protein-small molecule, and protein nucleic acid interactions based on the E. coli TEM-1  $\beta$ -lactamase

INVENTOR(S): Michnick, Stephen W.; Galarneau, Andre

PATENT ASSIGNEE(S): Odyssey Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 13

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001094617	A2	20011213	WO 2001-US17886	20010601 <--
WO 2001094617	A3	20030206		
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2244349	A1	20000130	CA 1998-2244349	19980730 <--
US 20030108869	A1	20030612	US 2001-870018	20010531
US 6828099	B2	20041207		
CA 2411842	A1	20011213	CA 2001-2411842	20010601 <--
EP 1305627	A2	20030502	EP 2001-983266	20010601
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2004504817	T	20040219	JP 2002-502157	20010601
US 20050233348	A1	20051020	US 2004-2259	20041203
AU 2008201746	A1	20080508	AU 2008-201746	20080421
AU 2009200049	A1	20090205	AU 2009-200049	20090106

PRIORITY APPLN. INFO.:

US 2000-208485P	P	20000602
US 2001-870018	A	20010531
US 1998-17412	A1	19980202
US 2000-499464	A2	20000207
AU 2002-13587	A3	20010601
WO 2001-US17886	W	20010601
AU 2005-203580	A3	20050811

AB The present invention relates generally to protein complementation assays (PCA) and more specifically to PCA assays based on the E. coli TEM-1  $\beta$ -lactamase for the detection of protein-protein, protein-small mol., and protein nucleic acid interactions. In the present invention, an in vitro colorimetric assay using the substrate, nitrocefin, and an in vivo fluorescence assay using the substrate, CCF2/AM, were disclosed in mammalian cells. The invention is also directed to pos. and neg. survival assays using cephalosporin-cytotoxic prodrug conjugates.

IT 183736-69-8

RL: BSU (Biological study, unclassified); BIOL (Biological study) (substrate; protein fragment complementation assay (PCA) for detection of protein-protein, protein-small mol., and protein nucleic acid interactions based on Escherichia coli  $\beta$ -lactamase TEM-1)

RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-

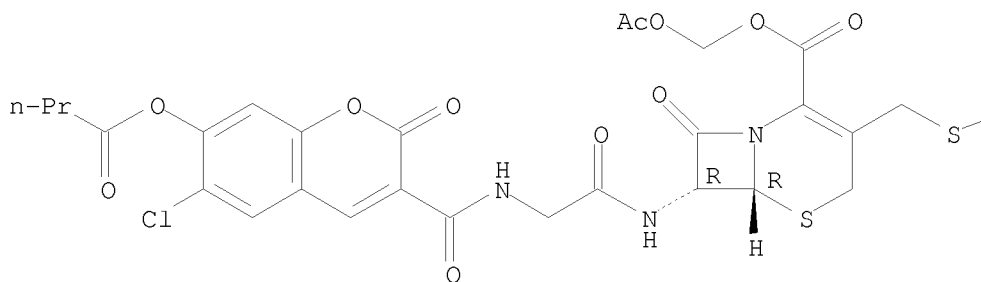
10/513699

yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
(CA INDEX NAME)

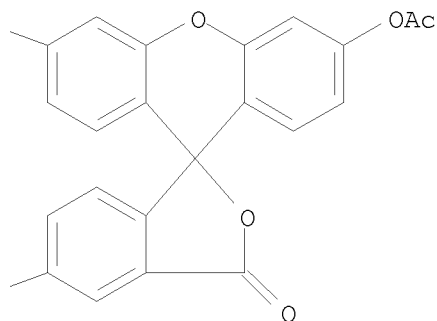
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese



L9 ANSWER 33 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:834105 CAPLUS

DOCUMENT NUMBER: 136:184019

TITLE: The reaction of digitoxin and digoxin with cyanoacetic acid hydrazide: synthesis of coumarin, thiazole, thiophene and pyridine derivatives with potential biological activities

AUTHOR(S): Doss, Senot H.; Wardakhan, Wagnat W.; Louca, Nadia A.  
 CORPORATE SOURCE: Hormones Department, National Research Center, Giza, Egypt

SOURCE: Archives of Pharmacal Research (2001),  
 24(5), 377-384

CODEN: APHRDQ; ISSN: 0253-6269

PUBLISHER: Pharmaceutical Society of Korea

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:184019

AB The reaction of either digitoxin or digoxin with cyanoacetic acid hydrazide gave the resp. hydrazone derivs. The reactivity of the latter products towards chemical reagents (benzenediazonium chloride, salicylaldehyde, malononitrile, Ph isothiocyanate, hydrazine hydrate, etc.) was studied to yield heterocyclic coumarin, thiazole, thiophene and pyridine derivs. with potential biol. activities.

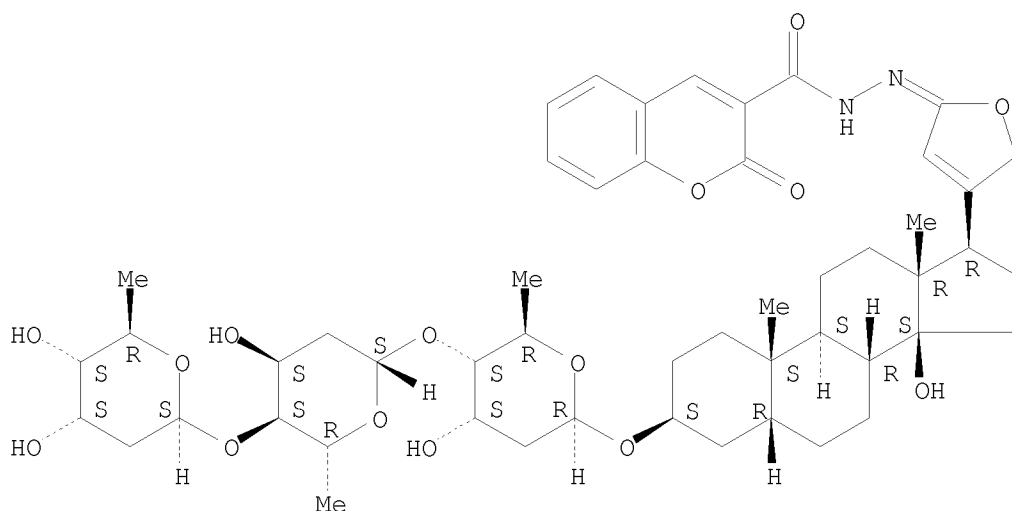
IT 400627-24-9P 400627-42-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of coumarin, thiazole, thiophene and pyridine derivs. of digitoxin and digoxin via their reaction with cyanoacetic acid hydrazide)

RN 400627-24-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
 [(3 $\beta$ , 5 $\beta$ , 14 $\beta$ )-3-[(O-2,6-dideoxy- $\beta$ -D-ribo-hexopyranosyl-(1 $\rightarrow$ 4)-O-2,6-dideoxy- $\beta$ -D-ribo-hexopyranosyl-(1 $\rightarrow$ 4)-2,6-dideoxy- $\beta$ -D-ribo-hexopyranosyl)oxy]-21,23-epoxy-14-hydroxy-24-norchol-20(22)-en-23-ylidene]hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.

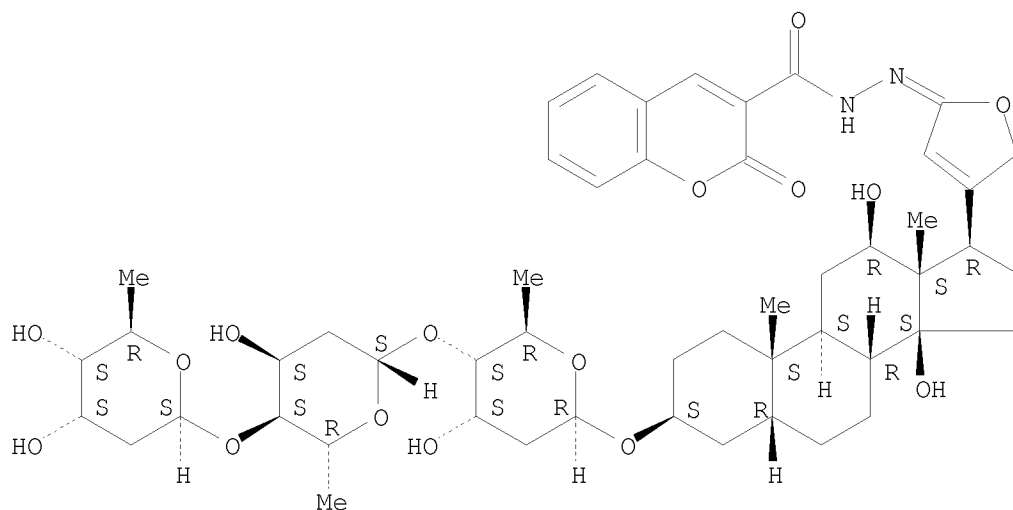


10/513699

RN 400627-42-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
[ (3 $\beta$ , 5 $\beta$ , 12 $\beta$ , 14 $\beta$ ) -3- [ (O-2, 6-dideoxy- $\beta$ -D-ribo-  
hexopyranosyl-(1 $\rightarrow$ 4)-O-2, 6-dideoxy- $\beta$ -D-ribo-hexopyranosyl-  
(1 $\rightarrow$ 4)-2, 6-dideoxy- $\beta$ -D-ribo-hexopyranosyl) oxy]-21, 23-epoxy-  
12, 14-dihydroxy-24-norchol-20(22)-en-23-ylidene]hydrazide (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



```
OS.CITING REF COUNT:      4      THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
                                (4 CITINGS)
REFERENCE COUNT:          19      THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

10/513699

L9 ANSWER 34 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:773489 CAPLUS

DOCUMENT NUMBER: 136:131131

TITLE: Proteins and cyanine dyes. Part III. Synthesis and spectroscopic studies of benzothiazolo-4-[1,2,6-trimethylpyridinium] monomethine cyanine dyes for fluorescent detection of bovine serum albumin in solutions

AUTHOR(S): Yarmoluk, Sergiy M.; Kryvorotenko, Dmytro V.; Baland, Anatoliy O.; Losytskyy, Mykhaylo Yu.; Kovalska, Vladyslava B.

CORPORATE SOURCE: Institute of Molecular Biology and Genetics, Ukrainian National Academy of Sciences, Kiev, 03143, Ukraine

SOURCE: Dyes and Pigments (2001), 51(1), 41-49

CODEN: DYPIDX; ISSN: 0143-7208

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The spectral-luminescent properties of a series of new cyanine dyes as possible probes for homogeneous assay of proteins have been studied. The fluorescent cyanine dyes development was based on the principle of "affinity-modifying group" with the use of benzothiazolo-4-[1,2,6-trimethylpyridinium] monomethine as template. It was shown that the cyanine dye P-5 can be used as a sensitive and specific fluorescent probe for the detection of BSA.

IT 393510-32-2P

RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(synthesis and spectroscopic studies of benzothiazolo-4-[1,2,6-trimethylpyridinium] monomethine cyanine dyes for fluorescent detection of bovine serum albumin in solns.)

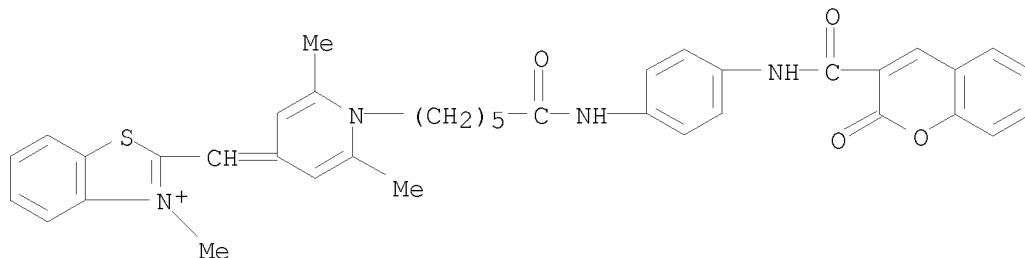
RN 393510-32-2 CAPLUS

CN Benzothiazolium, 2-[[2,6-dimethyl-1-[6-oxo-6-[[4-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenyl]amino]hexyl]-4(1H)-pyridinylidene]methyl]-3-methyl-, perchlorate (1:1) (CA INDEX NAME)

CM 1

CRN 393510-31-1

CMF C38 H37 N4 O4 S

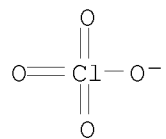


CM 2

CRN 14797-73-0

10/513699

CMF C1 O4



OS.CITING REF COUNT:	12	THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT:	12	THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 35 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:747223 CAPLUS

DOCUMENT NUMBER: 135:283166

TITLE: Methods and compositions for screening calcium release-activated calcium channel (Icrac) modulators

INVENTOR(S): Normant, Emmanuel; Allen, Janet; Roman, Francois; Brunelle, Gilles

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1143013	A1	20011010	EP 2000-400923	20000403 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1143017	A2	20011010	EP 2001-400795	20010328 <--
EP 1143017	A3	20040128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 20020034728	A1	20020321	US 2001-821811	20010330 <--
US 6696267	B2	20040224		
CA 2342677	A1	20011003	CA 2001-2342677	20010402 <--
BR 2001001294	A	20011106	BR 2001-1294	20010402 <--
JP 2001314193	A	20011113	JP 2001-103164	20010402 <--
MX 2001003405	A	20050630	MX 2001-3405	20010402
US 20040121381	A1	20040624	US 2003-691553	20031024
PRIORITY APPLN. INFO.:			EP 2000-400923	A 20000403
			US 2001-821811	A1 20010330

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to compns. and methods directed at screening or characterizing compds. that modulate the activity of calcium channels in cells, preferably calcium-release activated calcium channels (Icrac) in cells. The compns. and methods can be used to produce inhibitors or activators of the channels, which represent leads or candidate therapeutic drugs for treating various pathol. conditions. More specifically, the method comprises (a) contacting a test compound and a calcium channel activator, preferably an Icrac activator with a population of calcium channel-expressing cells, preferably Icrac-expressing cells containing a reporter construct comprising a reporter gene under the control of a NFAT-inducible promoter, and (b) determining the activity of the test compound

on

the calcium release-activated channel by assessing the reporter gene expression in said cells.

IT 183736-69-8, GeneBLAzer

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(GeneBLAzer; calcium release-activated calcium channel (Icrac) modulator screening)

RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-

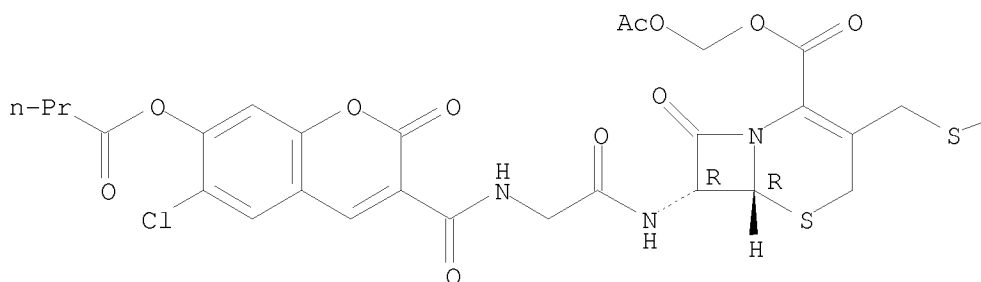
10/513699

yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
(CA INDEX NAME)

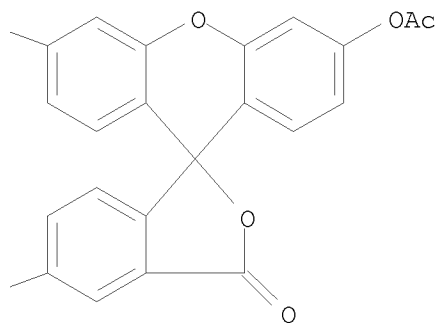
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 36 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:687354 CAPLUS

DOCUMENT NUMBER: 135:253737

TITLE: Cytosolic forms of  $\beta$ -lactamase and fluorescent substrates useful for monitoring gene expression

INVENTOR(S): Tsien, Roger Y.; Zlokarnik, Gregor

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: U.S., 66 pp., Cont.-in-part of U.S. 5,741,657.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6291162	B1	20010918	US 1996-727616	19961015 <--
US 5741657	A	19980421	US 1995-407544	19950320 <--
WO 9630540	A2	19961003	WO 1996-US4059	19960320 <--
WO 9630540	A3	19970109		
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
EP 1405922	A2	20040407	EP 2003-25361	19960320
EP 1405922	A3	20040929		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
US 5955604	A	19990921	US 1997-955401	19971021 <--
EP 982398	A1	20000301	EP 1999-118473	19990917 <--
EP 982398	B1	20031105		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI			
US 6472205	B1	20021029	US 2000-481756	20000111 <--
US 20030119085	A1	20030626	US 2002-280482	20021024
US 7157575	B2	20070102		
JP 2005021172	A	20050127	JP 2004-305450	20041020
JP 3856807	B2	20061213		
US 20070020715	A1	20070125	US 2006-447691	20060605
US 20070184513	A1	20070809	US 2006-606642	20061129

PRIORITY APPLN. INFO.:

US 1995-407544	A2	19950320
WO 1996-US4059	W	19960320
EP 1996-912454	A3	19960320
JP 1996-529573	A3	19960320
US 1996-727616	A1	19961015
US 1996-732178	A1	19961016
EP 1999-118473	A3	19990917
US 2000-481756	A1	20000111
US 2001-261313P	P	20010112
US 2002-44486	A2	20020111
US 2002-280482	A2	20021024
US 2004-884019	A2	20040702

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention is directed to nucleic acid mols. that encode a cytosolic form of  $\beta$ -lactamase and cells that include such nucleic

acid mols. The  $\beta$ -lactamase variants comprise *Escherichia coli*  $\beta$ -lactamase RTEM with replacement of the signal sequence by either Met-Gly or Met-Asp, or *Bacillus licheniformis*  $\beta$ -lactamase with the signal sequence replaced by Met. Mammalian Kozak sequences are inserted into the plasmid vectors for improved expression of the  $\beta$ -lactamase variants in mammalian cells. Membrane-permeable substrates are synthesized comprising a cephalosporin backbone serving as a cleavable linker between two fluorescent dyes. Fluorescence resonance energy transfer occurs from a 7-hydroxycoumarin moiety to a fluorescein moiety leading to green fluorescence when the compds. are excited at about 400 nm. After cleavage of the  $\beta$ -lactam ring, excitation of the 7-hydroxycoumarin moiety results in blue fluorescence; a 25-fold increase fluorescence at about 450 nm, and a 3-4-fold decrease in fluorescence at 515 nm, was observed. The substrates make it feasible to use  $\beta$ -lactamase as a reporter gene to monitor expression from a set of expression control sequences in transfected cells. Thus, measurement of activation of an intracellular glucocorticoid receptor was measured by its ability to upregulate the transcriptional activity of the glucocorticoid responsive element in the mouse mammary tumor virus promoter. This response to steroids was detected as increased intracellular  $\beta$ -lactamase activity on the substrate, causing an appropriate change in fluorescent signal.

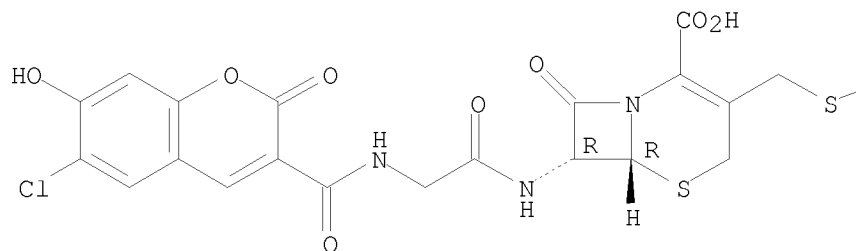
IT 183736-52-9P 183736-66-5P 183736-69-8P  
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (cytosolic forms of  $\beta$ -lactamase and fluorescent substrates useful for monitoring gene expression)

RN 183736-52-9 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-,  
 (6R,7R)- (9CI) (CA INDEX NAME)

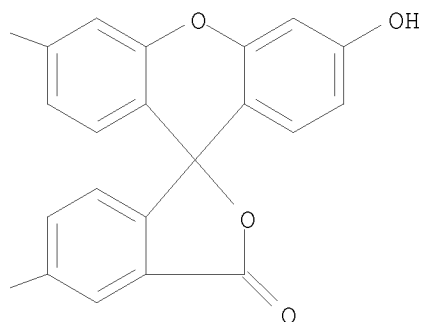
Absolute stereochemistry.

PAGE 1-A

HO—





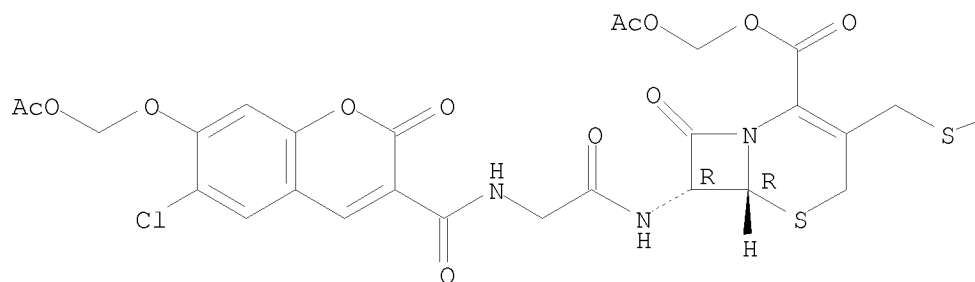


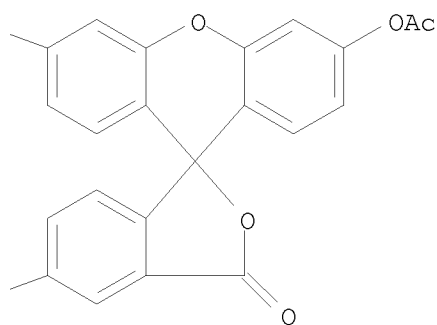
RN 183736-66-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[[[7-[(acetyloxy)methoxy]-6-chloro-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-8-oxo-,  
 (acetyloxy)methyl ester, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

AcO



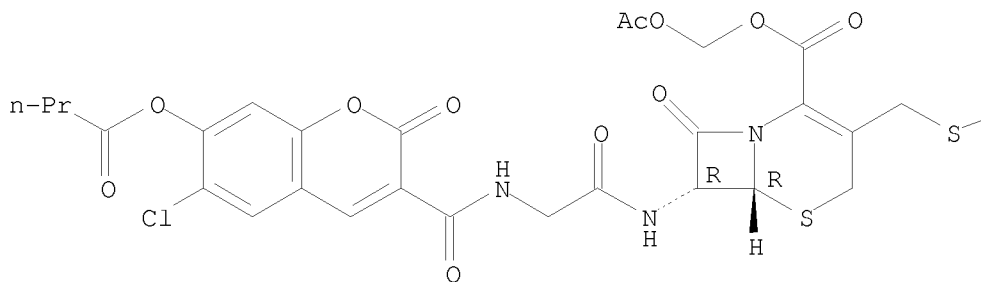


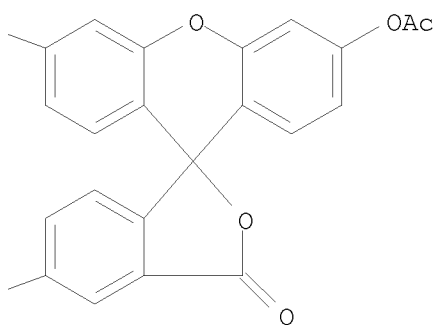
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
 (CA INDEX NAME)

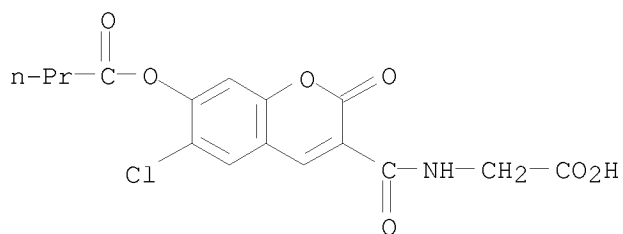
Absolute stereochemistry.

AcO

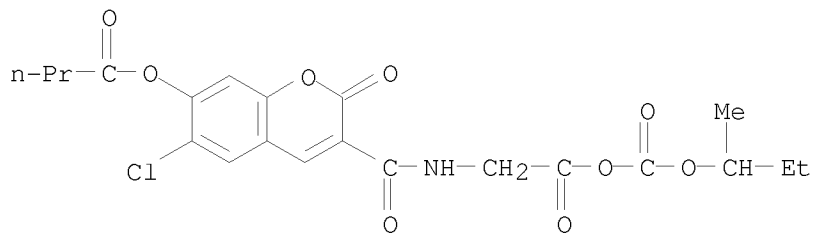




IT 183736-49-4P 183736-68-7P 183736-75-6P  
 361146-66-9P 361146-67-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (cytosolic forms of  $\beta$ -lactamase and fluorescent substrates useful  
 for monitoring gene expression)  
 RN 183736-49-4 CAPLUS  
 CN Butanoic acid, 3-[[[(carboxymethyl)amino]carbonyl]-6-chloro-2-oxo-2H-1-  
 benzopyran-7-yl ester (CA INDEX NAME)

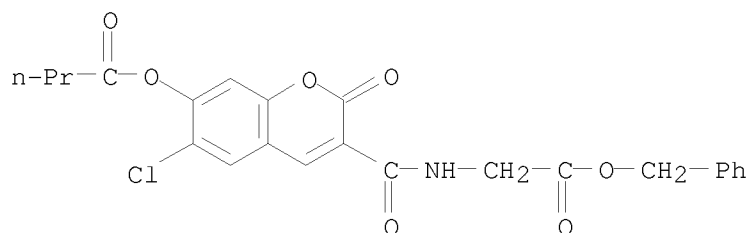


RN 183736-68-7 CAPLUS  
 CN Butanoic acid, 6-chloro-3-[[[2-[[[(1-methylpropoxy)carbonyl]oxy]-2-  
 oxoethyl]amino]carbonyl]-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



RN 183736-75-6 CAPLUS  
 CN Butanoic acid, 6-chloro-2-oxo-3-[[[2-oxo-2-  
 (phenylmethoxy)ethyl]amino]carbonyl]-2H-1-benzopyran-7-yl ester (CA INDEX  
 NAME)

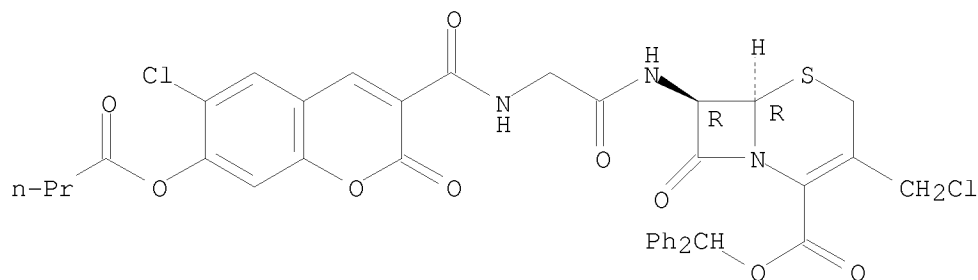
10/513699



RN 361146-66-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-(chloromethyl)-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, diphenylmethyl ester, (6R,7R)-  
(CA INDEX NAME)

Absolute stereochemistry.



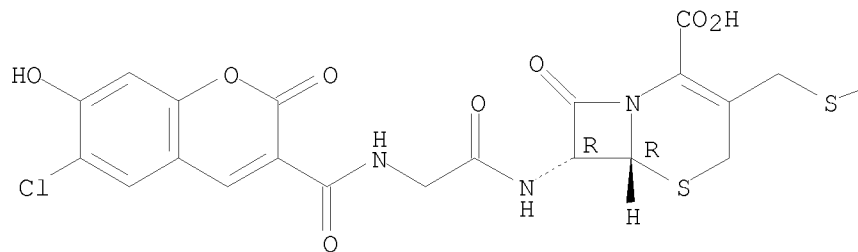
RN 361146-67-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

AcO

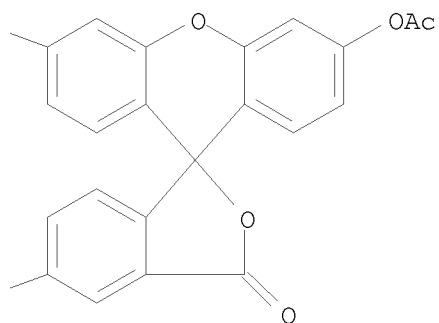


<12/04/2007>

Erich Leese

10/513699

PAGE 1-B



REFERENCE COUNT:

90

THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 37 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:645627 CAPLUS  
DOCUMENT NUMBER: 135:207865  
TITLE: Use of inhibitors in reporter assays  
INVENTOR(S): Zlokarnik, Gregor; Feng, Luxin  
PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA  
SOURCE: U.S., 24 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6284461	B1	20010904	US 1998-67612	19980428 <--
PRIORITY APPLN. INFO.:			US 1998-67612	19980428

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to methods for increasing the signal-to-noise ratio of an enzyme assay by contacting a sample comprising a membrane compartment with an inhibitor of an enzyme, contacting the sample with a substrate for the enzyme, and determining the activity of the enzyme. The method can be in a heterogeneous or homogeneous format. The methods of the present invention can be used for a variety of purposes, such as increasing the dynamic range of an enzyme assay, extending the useful loading time or assay measurement time of an enzyme assay, profiling the level of an enzyme in a sample, modulating the threshold activity of an enzyme assay, screening test compds. for activity, identifying modulators, identifying an inhibitor of an enzyme, and detecting membrane permeability. The present invention also relates to compds. useful in these methods. Studies were made using CHO cells expressing a cytosolic  $\beta$ -lactamase reporter gene under control of a G-protein-coupled receptor (or other receptor). Clavulanic acid reduced background  $\beta$ -lactamase reporter activity.

IT 183736-69-8  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(use of inhibitors in reporter assays)

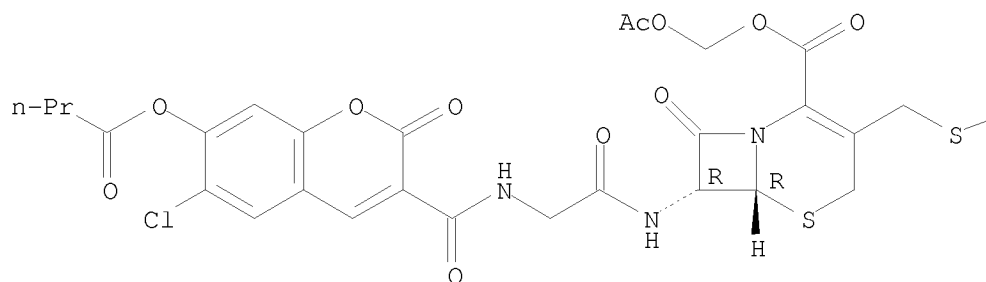
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
(CA INDEX NAME)

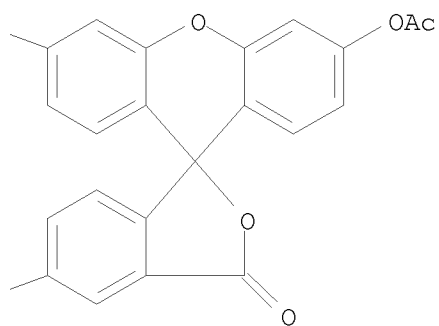
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



REFERENCE COUNT:

11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 38 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:582076 CAPLUS

DOCUMENT NUMBER: 135:177715

TITLE: Methods of protein destabilization with noncleavable ubiquitin fusion proteins and uses in assays and in regulating target protein concentrations

INVENTOR(S): Stack, Jeffrey H.; Whitney, Michael; Cubitt, Andrew B.; Pollok, Brian A.

PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA

SOURCE: PCT Int. Appl., 171 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001057242	A2	20010809	WO 2001-US3791	20010202 <--
WO 2001057242	A3	20020613		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 7262005	B1	20070828	US 2000-498098	20000204
CA 2400013	A1	20010809	CA 2001-2400013	20010202 <--
EP 1255853	A2	20021113	EP 2001-907018	20010202 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003534775	T	20031125	JP 2001-555865	20010202
US 20080227129	A1	20080918	US 2007-821562	20070622
PRIORITY APPLN. INFO.:			US 2000-498098	A2 20000204
			WO 2001-US3791	W 20010202

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB This invention is directed towards methods of destabilizing proteins in living cells, and their use for the development of novel assays. In one embodiment, the invention comprises the use of non-cleavable multimerized ubiquitin fusion proteins to destabilize a target protein, such as a reporter moiety. In one aspect of this method the constructs also comprises a linker that operatively couples the reporter moiety to the multimerized ubiquitin fusion protein. In this embodiment, enzymic modification of the linker results in a modulation of the coupling of the reporter protein to the multimerized ubiquitin domains resulting in a change in the stability of the reporter moiety. The level of the reporter moiety in the cell can then be used as a measure of the enzymic activity in the cell. In another embodiment the invention provides for a generalized way of coordinately regulating the cellular concentration of a plurality of target proteins. In one aspect of this method, the target proteins are operatively coupled to a ubiquitin fusion protein via linker containing a protease cleavage site. Cleavage of the linker by a protease results in uncoupling of the target protein from the multimerized ubiquitin construct, and results in an increase in the stability and



10/513699

concentration of the target protein. From one to four copies of 76-valine-ubiquitin were fused to  $\beta$ -lactamase and tested.

IT 183736-69-8, CCF 2AM

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (methods of protein destabilization with mutant ubiquitin fusion proteins and uses in assays and in regulating target protein concns.)

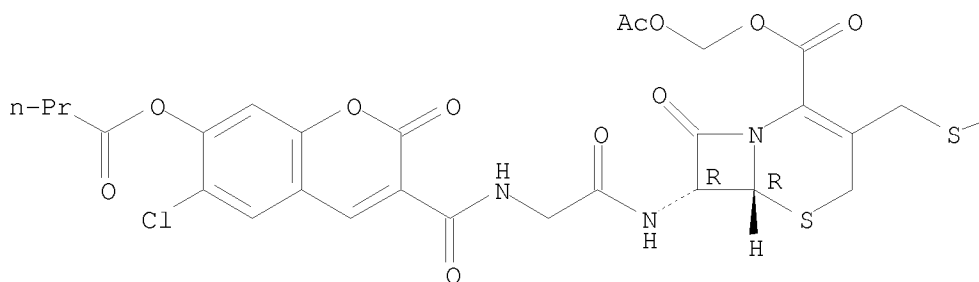
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)- (CA INDEX NAME)

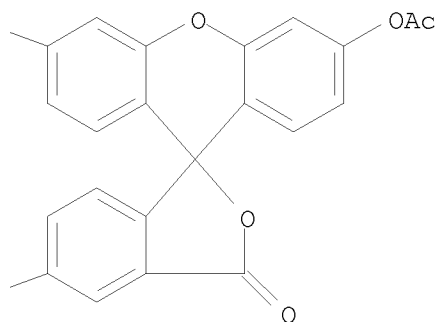
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese

10/513699

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 39 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:545674 CAPLUS

DOCUMENT NUMBER: 135:137516

TITLE: Synthesis of heteroarylbenzamides and analogs used for inhibiting protein kinases

INVENTOR(S): Bender, Steven Lee; Bhumralkar, Dilip; Collins, Michael Raymond; Cripps, Stephan James; Deal, Judith Gail; Nambu, Mitchell David; Palmer, Cynthia Louise; Peng, Zhengwei; Varney, Michael David; Jia, Lei

PATENT ASSIGNEE(S): Agouron Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 237 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2001053274	A1	20010726	WO 2001-US1723	20010119 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2394703	A1	20010726	CA 2001-2394703	20010119 <--
US 20020103203	A1	20020801	US 2001-764306	20010119 <--
US 6635641	B2	20031021		
EP 1252146	A1	20021030	EP 2001-906592	20010119 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001008025	A	20021105	BR 2001-8025	20010119 <--
JP 2003529558	T	20031007	JP 2001-553276	20010119
MX 2002007102	A	20030128	MX 2002-7102	20020719
US 20040092747	A1	20040513	US 2003-621979	20030717
PRIORITY APPLN. INFO.:			US 2000-177059P	P 20000121
			US 2001-764306	A3 20010119
			WO 2001-US1723	W 20010119

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 135:137516

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [Z = CH, NH; Q = moiety such that ring A is (un)substituted mono- or bicyclic heteroaryl which has at least 2 carbon atoms in the heteroaryl ring system; X = CH<sub>2</sub>, O, S, NH; Y = CH<sub>2</sub>, O, S, provided at least one of X and Y = CH<sub>2</sub> or X and Y form a cyclopropyl ring; R<sub>2</sub>-3 = H, Me, halo, CF<sub>3</sub>, CN; R<sub>4</sub> = CONHR<sub>5</sub>, NHCOR<sub>6</sub>; where R<sub>5</sub> = (un)substituted aryl, heteroaryl, cycloalkyl, etc.; R<sub>6</sub> = (un)substituted

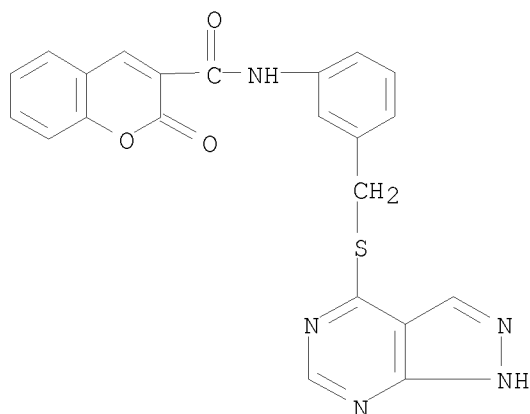
aryl, heteroaryl, cycloalkyl, etc] are prepared. Examples include synthetic procedures for over 150 compds., 11 biol. assays and 3 sample formulations. For instance, 3-mercaptobenzoic acid was treated with  $\alpha$ -chloro-N-methoxy-N-methylacetamide followed by carbodiimide coupling to 2-methyl-6-aminoquinoline to give II. II was converted to a  $\beta$ -thiono-ketone with thioacetanilide/n-BuLi followed by treatment with hydrazine to give pyrazole III. III gave 85% inhibition of an lck protein tyrosine kinase at 5  $\mu$ M and had  $K_i = 2.21$  nM for VEGF-R2A50. Treatment of cancer as well as other disease states associated with unwanted angiogenesis and/or cellular proliferation, such as diabetic retinopathy, neovascular glaucoma, rheumatoid arthritis, and psoriasis are claimed uses of the invention.

IT 351323-49-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(synthesis of heteroarylbenzamides used for inhibiting protein kinases)

RN 351323-49-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[3-[(1H-pyrazolo[3,4-d]pyrimidin-4-ylthio)methyl]phenyl]- (CA INDEX NAME)



OS.CITING REF COUNT:	14	THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
REFERENCE COUNT:	7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 40 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:436226 CAPLUS

DOCUMENT NUMBER: 135:195475

TITLE: Recyclization of 2-imino-2H-1-benzopyrans under the action of nucleophilic reagents. 5. Reaction of 2-iminocoumarin-3-carboxamide with anthranilic acid and its derivatives

AUTHOR(S): Kovalenko, S. N.; Bylov, I. E.; Belokon, Ya. V.; Chernykh, V. P.

CORPORATE SOURCE: Ukrainian Pharmaceutical Academy, Kharkov, 310002, Ukraine

SOURCE: Chemistry of Heterocyclic Compounds (New York, NY, United States)(Translation of Khimiya Geterotsiklicheskikh Soedinenii) (2001), Volume Date 2000, 36(9), 1026-1031  
CODEN: CHCCAL; ISSN: 0009-3122

PUBLISHER: Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:195475

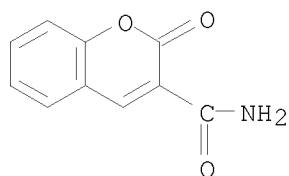
AB N-Substituted 2-iminocoumarins are formed on reacting 2-iminocoumarin-3-carboxamide with anthranilic acid, Me anthranilate, anthranilamide, and anthranilonitrile. Depending on the reaction conditions, these recyclize into the corresponding 3-substituted coumarins or are hydrolyzed to coumarin-3-carboxamide. An alternative synthesis of some of the compds. has been effected.

IT 1846-78-2P 73877-78-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(reaction of 2-iminocoumarin-3-carboxamide with anthranilic acid and its derivs.)

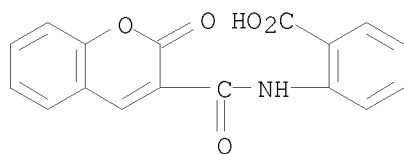
RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



RN 73877-78-8 CAPLUS

CN Benzoic acid, 2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

10/513699

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese

L9 ANSWER 41 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:435043 CAPLUS

DOCUMENT NUMBER: 135:43136

TITLE: Detection of transmembrane potentials by fluorescent resonance energy transfer (FRET) between a hydrophobic fluorescent ion and a chromophore

INVENTOR(S): Tsien, Roger Y.; Gonzalez, Jesus E. III

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001042211	A2	20010614	WO 2000-US33739	20001212 <--
WO 2001042211	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 20020137201	A1	20020926	US 1999-378534	19990820 <--
US 6596522	B2	20030722		
CA 2393562	A1	20010614	CA 2000-2393562	20001212 <--
AU 2001020930	A	20010618	AU 2001-20930	20001212 <--
AU 783487	B2	20051103		
JP 2003518246	T	20030603	JP 2001-543512	20001212
EP 1409456	A2	20040421	EP 2000-984287	20001212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 1999-459956	A 19991213
			US 1997-765860	A1 19970508
			WO 2000-US33739	W 20001212

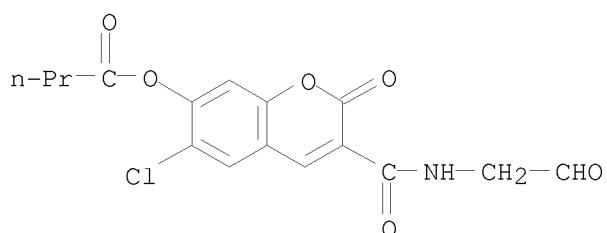
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 135:43136

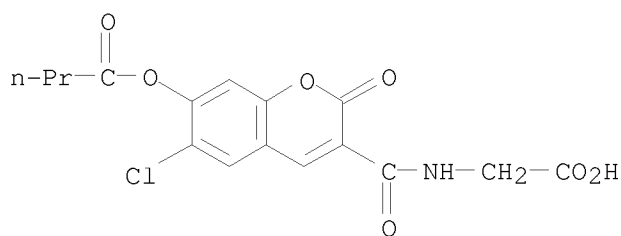
AB Methods and compns. are provided for detecting changes in membrane potential in membranes biol. systems. In one aspect, the method comprises: (a) providing a living cell with a first reagent comprising a charged hydrophobic mol. which is typically a fluorescence resonance energy transfer (FRET) acceptor or donor, or is a quencher and is capable of redistributing within the membrane of a biol. membrane in response to changes in the potential across the membrane; (b) providing the cell with a second reagent that can label the first face or the second face of a biol. membrane within the cell; (c) detecting light emission from the first reagent or the second reagent. One aspect of this method involves monitoring membrane potential changes in subcellular organelle membranes in a living cell. Another aspect of the invention is the use of certain embodiments of the method for the screening of test chems. for activity to modulate the activity of a target ion channel. Another aspect of the present invention is a transgenic organism comprising a first reagent that

comprises a charged hydrophobic fluorescent mol., and a second reagent comprising a bioluminescent or naturally fluorescent protein.

- IT 344571-18-2DP, N-linked to dimyristoyl phosphatidylethanolamine  
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
 (detection of transmembrane potentials by fluorescent resonance energy transfer (FRET) between a hydrophobic fluorescent ion and a chromophore)  
 RN 344571-18-2 CAPLUS  
 CN Butanoic acid, 6-chloro-2-oxo-3-[[ (2-oxoethyl) amino] carbonyl]-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



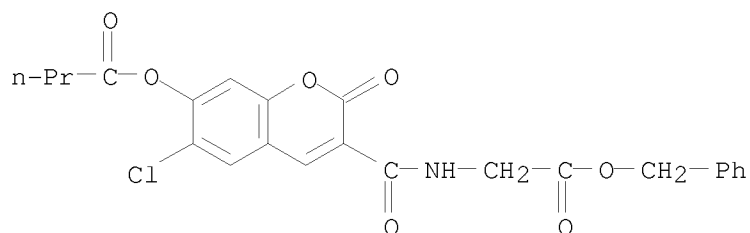
- IT 183736-49-4P 183736-75-6P 344571-12-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (detection of transmembrane potentials by fluorescent resonance energy transfer (FRET) between a hydrophobic fluorescent ion and a chromophore)  
 RN 183736-49-4 CAPLUS  
 CN Butanoic acid, 3-[[ (carboxymethyl) amino] carbonyl]-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



- RN 183736-75-6 CAPLUS  
 CN Butanoic acid, 6-chloro-2-oxo-3-[[ [2-oxo-2-(phenylmethoxy)ethyl] amino] carbonyl]-2H-1-benzopyran-7-yl ester (CA INDEX NAME)

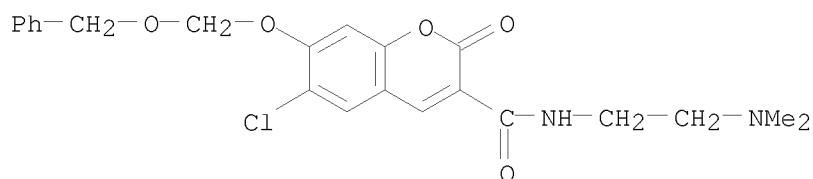


10/513699



RN 344571-12-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-[2-(dimethylamino)ethyl]-2-oxo-7-[(phenylmethoxy)methoxy]- (CA INDEX NAME)

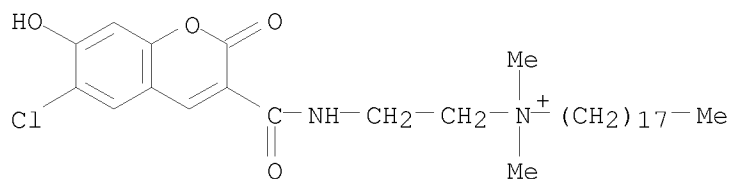


IT 344571-13-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(detection of transmembrane potentials by fluorescent resonance energy transfer (FRET) between a hydrophobic fluorescent ion and a chromophore)

RN 344571-13-7 CAPLUS

CN 1-Octadecanaminium, N-[2-[[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)



● I<sup>-</sup>

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 42 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:380802 CAPLUS  
DOCUMENT NUMBER: 134:363348  
TITLE: Hydrolytic enzyme substrates and fluorescence  
resonance energy transfer assay method  
INVENTOR(S): Jarnigan, Kurt; Leger, Roger; Lee, Ving J.; Morgans,  
David  
PATENT ASSIGNEE(S): Iconix Pharmaceuticals, Inc., USA  
SOURCE: PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2001036662	A2	20010525	WO 2000-US41908	20001103 <--
WO 2001036662	A3	20020530		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2388904	A1	20010525	CA 2000-2388904	20001103 <--
EP 1230380	A2	20020814	EP 2000-991947	20001103 <--
EP 1230380	B1	20040211		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
US 6455268	B1	20020924	US 2000-706342	20001103 <--
AT 259424	T	20040215	AT 2000-991947	20001103
PRIORITY APPLN. INFO.:			US 1999-164081P	P 19991105
			WO 2000-US41908	W 20001103

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 134:363348

AB Compds. of the invention have the structure D-L-A (L = a linking moiety that maintains D and A in a configuration compatible with fluorescence energy transfer (FRET); D = a fluorescent donor moiety capable of causing an acceptor moiety to fluoresce by FRET; A = a fluorescent acceptor moiety capable of accepting energy from the donor moiety by FRET and fluorescing only after cleavage of one or more labile groups to provide acceptor A). These compds. are useful as fluorescent substrates for detection of enzymes in vivo. Thus, D-L-A compds. containing fluorescein derivs. linked to coumarin derivs. were prepared and used in orange peel esterase and in  $\beta$ -glucuronidase determination

IT 1102203-90-6 1102203-91-7 1102203-92-8

RL: PRPH (Prophetic)

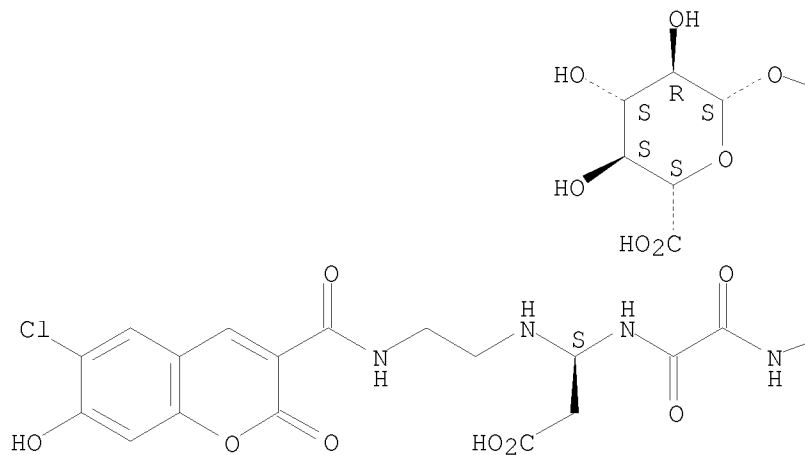
(Hydrolytic enzyme substrates and fluorescence resonance energy transfer assay method)

RN 1102203-90-6 CAPLUS

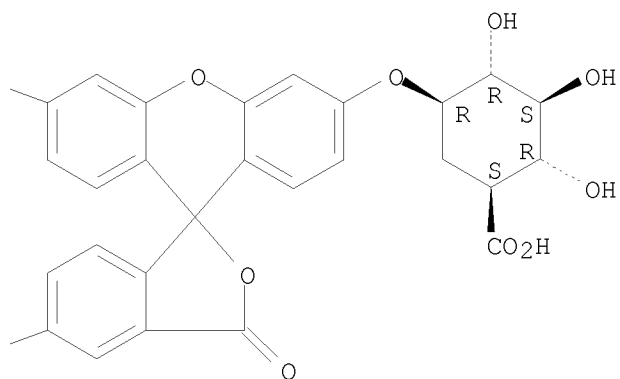
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

PAGE 1-A



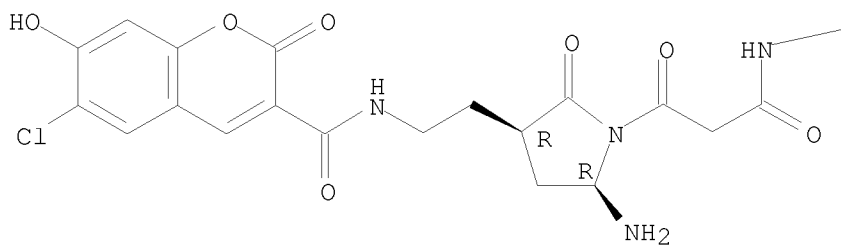
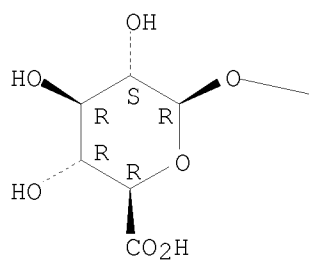
PAGE 1-B



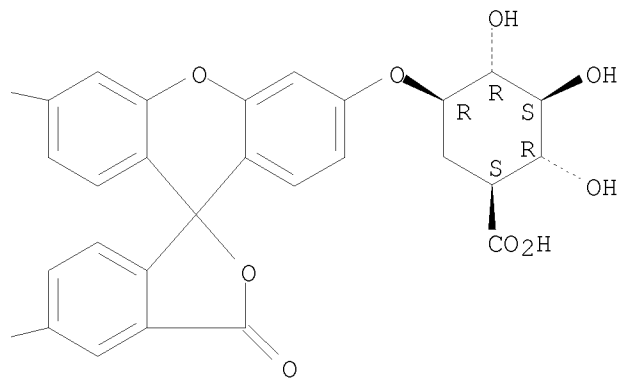
RN 1102203-91-7 CAPLUS  
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

PAGE 1-A



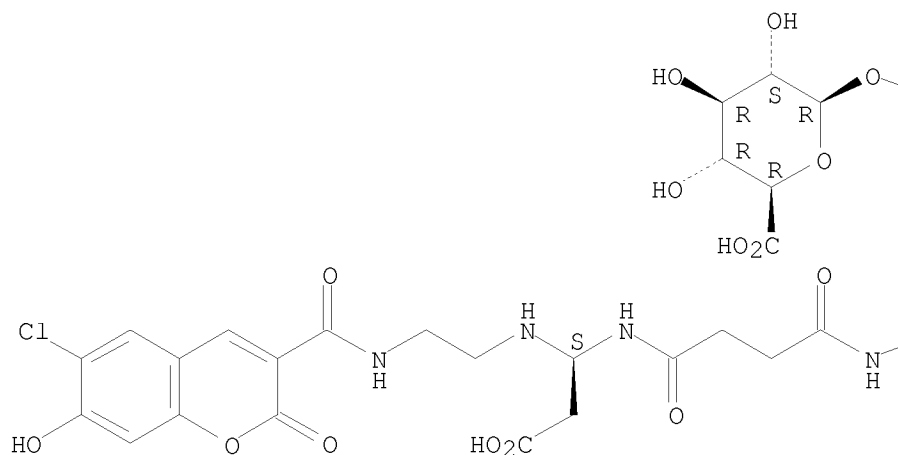
PAGE 1-B



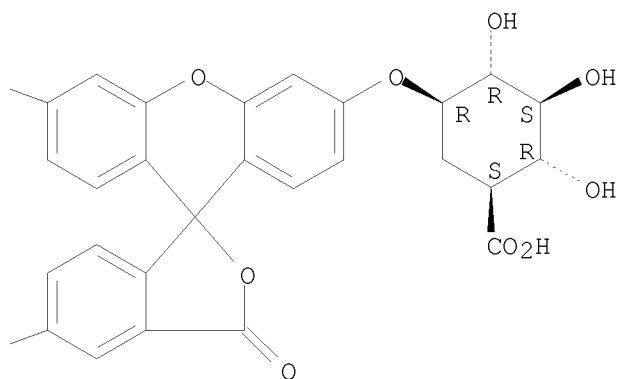
RN 1102203-92-8 CAPLUS  
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

PAGE 1-A



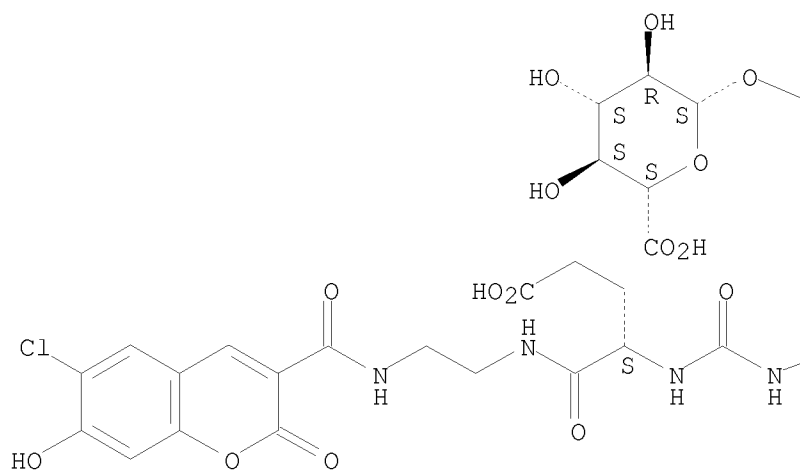
PAGE 1-B



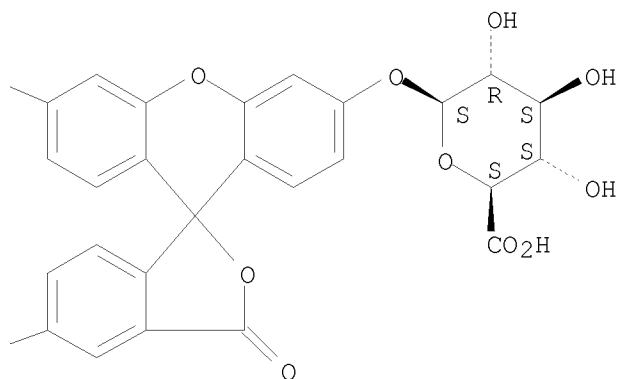
IT 340735-81-1P 340735-92-4P  
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (hydrolytic enzyme substrates and fluorescence resonance energy transfer assay method)  
 RN 340735-81-1 CAPLUS  
 CN  $\beta$ -D-Glucopyranosiduronic acid, 5-[[[(1S)-3-carboxy-1-[[2-[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]amino]carbonyl]propyl]amino]carbonyl]amino]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl bis- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



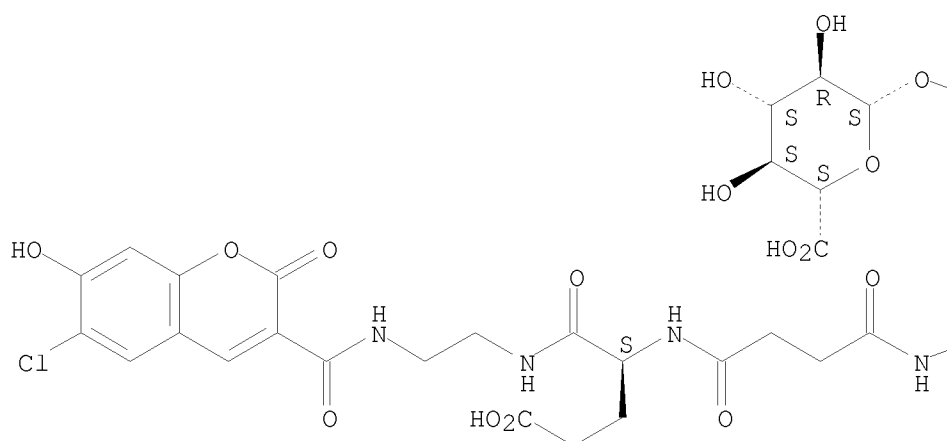
PAGE 1-B



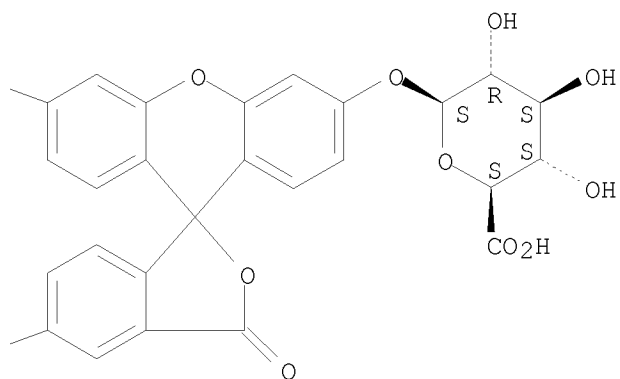
RN 340735-92-4 CAPLUS  
 CN  $\beta$ -D-Glucopyranosiduronic acid,  
 5-[[4-[[[(1S)-3-carboxy-1-[[[2-[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyl]amino]carbonyl]propyl]amino]-1,4-dioxobutyl]amino]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl bis- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

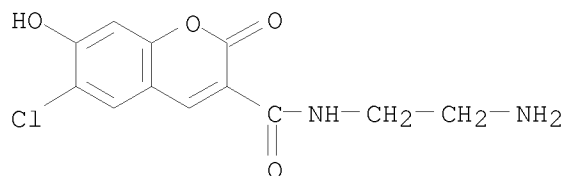


PAGE 1-B

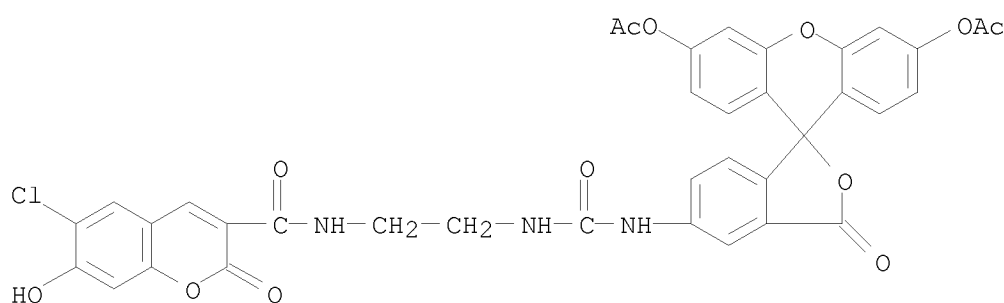


IT 340735-79-7P 340735-80-0P 340735-88-8P  
 340735-90-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (hydrolytic enzyme substrates and fluorescence resonance energy  
 transfer assay method)  
 RN 340735-79-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminoethyl)-6-chloro-7-hydroxy-2-oxo-  
 (CA INDEX NAME)

10/513699

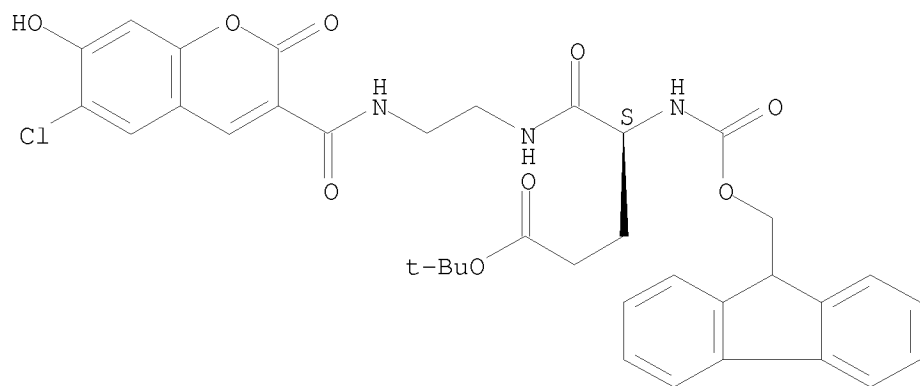


RN 340735-80-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]amino]carbonyl]amino]ethyl]-6-chloro-7-hydroxy-2-oxo- (CA INDEX NAME)



RN 340735-88-8 CAPLUS  
CN Pentanoic acid, 5-[[2-[[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]amino]-4-[[9H-fluoren-9-ylmethoxy]carbonyl]amino]-5-oxo-, 1,1-dimethylethyl ester, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



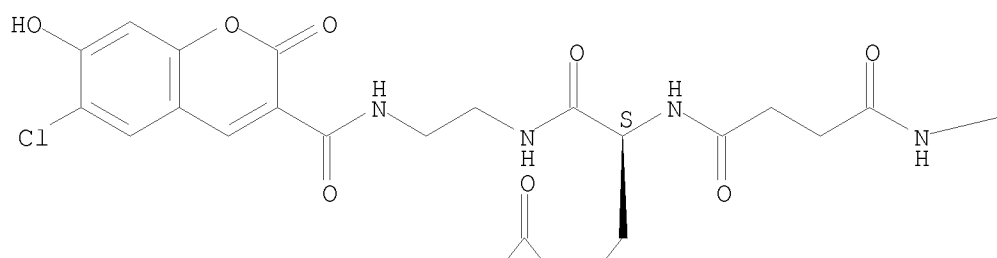
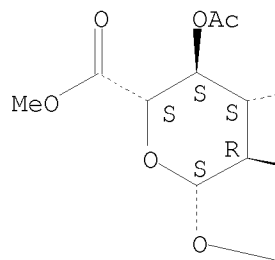
RN 340735-90-2 CAPLUS  
CN  $\beta$ -D-Glucopyranosiduronic acid, 5-[[4-[[[1S]-1-[[[2-[[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]amino]carbonyl]-4-(1,1-dimethylethoxy)-4-oxobutyl]amino]-1,4-dioxobutyl]amino]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl bis-, dimethyl ester, 2,2',3,3',4,4'-hexaacetate (9CI) (CA INDEX NAME)



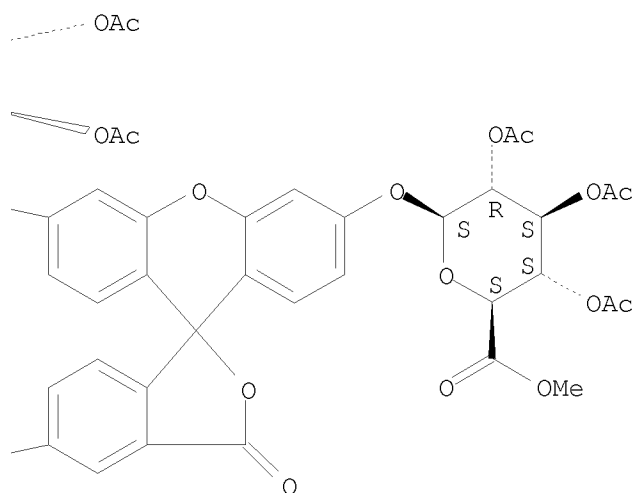
10/513699

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

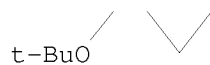


<12/04/2007>

Erich Leese

10/513699

PAGE 2-A



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)  
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 43 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:282534 CAPLUS

DOCUMENT NUMBER: 135:92599

TITLE: The reaction of  
2-amino-3-cyano-4,5,6,7-tetrahydrobenzo[b]thiophene  
with diethyl malonate: synthesis of coumarin,  
pyridine, and thiazole derivatives

AUTHOR(S): Mohareb, Rafat M.; El-Omran, Fatma A.; Ho, Jonathan Z.

CORPORATE SOURCE: Department of Chemistry, University of California,  
Berkeley, CA, 94720, USA

SOURCE: Heteroatom Chemistry (2001), 12(3), 168-175

CODEN: HETCE8; ISSN: 1042-7163

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:92599

AB The reaction of 2-amino-3-cyano-4,5,6,7-tetrahydrobenzo[b]thiophene with  
CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> gave the corresponding (ethoxycarbonyl)acetamide (I) and a  
tetrahydrobenzo[b]thieno[5,4:2,3]pyridine. The reactivity of I toward a  
variety of chemical reagents was studied to give azoles, azines, and their  
fused derivs.

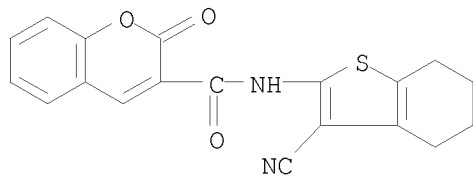
IT 348621-77-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of coumarins, pyridines, and thiazoles by amidation of  
aminocyanotetrahydrobenzo[b]thiophene with malonate)

RN 348621-77-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-cyano-4,5,6,7-tetrahydrobenzo[b]thien-  
2-yl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD  
(8 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 44 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:228654 CAPLUS

DOCUMENT NUMBER: 134:252657

TITLE: Compounds directed against pilus biogenesis and activity in pathogenic bacteria; methods and compositions for synthesis

INVENTOR(S): Kihlberg, Jan; Larsson, Andreas; Svensson, Anette; Fex, Tomas; Hultgren, Scott J.; Pinkner, Jerry

PATENT ASSIGNEE(S): Washington University, USA

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2001020995	A1	20010329	WO 2000-US26177	20000922 <--
WO 2001020995	A9	20021114		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-155822P P 19990923

OTHER SOURCE(S): MARPAT 134:252657

AB Many Gram-neg. pathogens assemble adhesive structures on their surfaces that allow them to colonize host tissues and cause disease. Novel compns. which inhibit or prevent the formation of a pilus chaperone-subunit complex are disclosed. Interfering with the function of the pili chaperone neg. affects the chaperone/ushe pathway which is one mol. mechanism by which Gram-neg. bacteria assemble adhesive pili structures and thus prevent or inhibit pilus assembly. Also provided are methods for the treatment or prevention of diseases caused by tissue-adhering pilus-forming bacteria by inhibiting the function of pilus chaperones. Also provided are pharmaceutical preps. capable of inhibiting or preventing the formation of a pilus chaperone-subunit complex. Also provided are methods of synthesizing the N-substituted amino acid compds. and compds. useful for the synthesis thereof. In particular, novel fluorinated linker compds. and methods of synthesis are provided. Methods for using the fluorinated linker compds. in methods of solid-phase synthesis of the N-substituted amino acid compds. are also disclosed. Chiral compds. R4CHR1NR2COR3 [R1-R3 = (un)substituted alkyl, acyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl, heterocycloalkyl; R4 = CO2H, CONH2, CHO, B(OH)2, P(O)(OH)2, alkyl or haloalkyl ketone group] and their salts, esters, and amines are claimed. Thus, N-[2-(1H-indol-3-yl)ethyl]-N-(naphthalene-2-carbonyl)tyrosine was prepared and assayed for affinity for periplasmic chaperones PapD and FimC (KD estimated as 1-100µM).

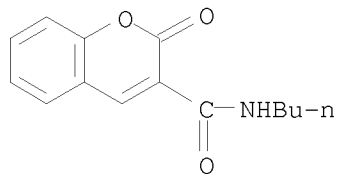
IT 1846-83-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(compds. directed against pilus biogenesis and activity in pathogenic

10/513699

bacteria)  
RN 1846-83-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-butyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 45 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:208508 CAPLUS  
DOCUMENT NUMBER: 134:249215  
TITLE: Substrates and screening methods for transport  
proteins  
INVENTOR(S): Dower, William J.; Gallop, Mark; Barrett, Ronald W.;  
Cundy, Kenneth C.; Chernov-Rogan, Tania  
PATENT ASSIGNEE(S): Xenoport, Inc., USA  
SOURCE: PCT Int. Appl., 144 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2001020331	A1	20010322	WO 2000-US25439	20000914 <--
WO 2001020331	A9	20021003		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1212619	A1	20020612	EP 2000-966735	20000914 <--
EP 1212619	B1	20070523		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
AT 363074	T	20070615	AT 2000-966735	20000914
US 7413536	B1	20080819	US 2000-661927	20000914
US 20090221442	A1	20090903	US 2008-172801	20080714
PRIORITY APPLN. INFO.:			US 1999-154071P	P 19990914
			US 2000-661927	A1 20000914
			WO 2000-US25439	W 20000914

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A variety of methods for assaying libraries of test compds. as ligands and/or substrates of transport proteins, including both carrier-type and receptor-type transport proteins, are provided. Both in vitro and in vivo screening methods are disclosed. Also provided are methods for screening DNA libraries to identify members that encode transport proteins. Pharmaceutical compns. including compds. identified via the screening methods are also provided. CHO K1 cells expressing PEPT1 transporter of human or rat were prepared. Fluorescent XP10486 was synthesized and used as PEPT1 substrate.

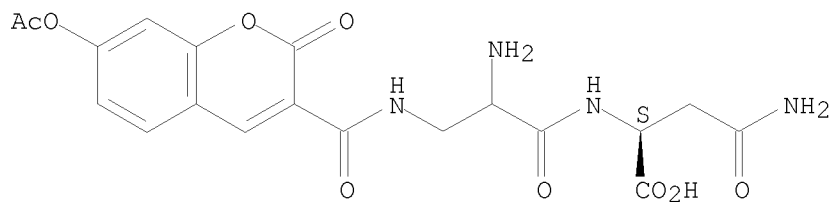
IT 330829-87-3P, GP 5-75-2  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(conditionally-fluorescent dipeptide; substrates and screening methods for transport proteins)

RN 330829-87-3 CAPLUS

CN L-Asparagine, 3-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]alanyl- (9CI) (CA INDEX NAME)

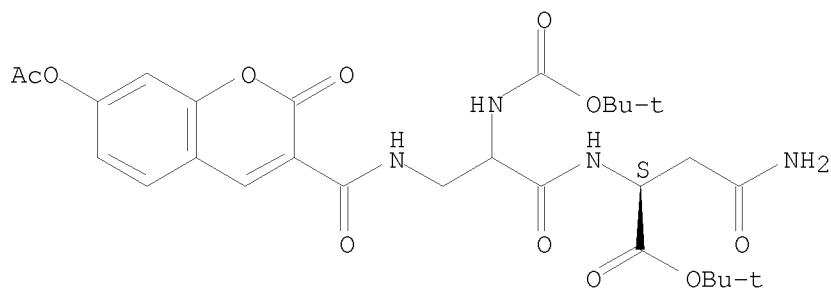
Absolute stereochemistry.

10/513699



IT 330795-53-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(substrates and screening methods for transport proteins)  
RN 330795-53-4 CAPLUS  
CN L-Asparagine, 3-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]-N-[(1,1-dimethylethoxy)carbonyl]alanyl-,  
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS  
RECORD (12 CITINGS)  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 46 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:178382 CAPLUS

DOCUMENT NUMBER: 134:219359

TITLE: Photon reducing agents and compositions for reducing undesirable light emission in fluorescence assays

INVENTOR(S): Zlokarnik, Gregor; Negulescu, Paul; Knapp, Tom; Tsien, Roger Y.; Rink, Tim

PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA

SOURCE: U.S., 39 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6200762	B1	20010313	US 1998-118497	19980717 <--
US 6214563	B1	20010410	US 1998-120516	19980721 <--
US 6221612	B1	20010424	US 1998-122477	19980723 <--
US 20010006820	A1	20010705	US 2001-759629	20010112 <--
US 7067324	B2	20060627		
US 20050136469	A1	20050623	US 2005-47074	20050131
US 20090162926	A1	20090625	US 2009-398744	20090305
PRIORITY APPLN. INFO.:			US 1997-54519P	P 19970801
			US 1998-122477	A1 19980723
			US 2001-759629	A1 20010112
			US 2005-47074	B1 20050131

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention provides a method for reducing undesirable light emission from a sample using at least one photon producing agent and at least one photon reducing agent (e.g. dye-based photon reducing agents). The present invention further provides a method for reducing undesirable light emission from a sample (e.g., a biochem. or cellular sample) with at least one photon producing agent and at least one collisional quencher. The present invention also provides a method for reducing undesirable light emission from a sample (e.g., a biochem. or cellular sample) with at least one photon producing agent and at least one quencher, such as an electronic quencher. The present invention further provides a method of determining bound and free analyte in a sample using at least one photon reducing agent. The present invention also provides a method of screening test chems. in fluorescent assays using photon reducing agents. The present invention also provides compns. and kits for practicing these methods.

IT 183736-69-8, CCF 2AM

RL: ARU (Analytical role, unclassified); PRP (Properties); ANST (Analytical study)

(photon reducing agents and compns. for reducing undesirable light emission in fluorescence assays)

RN 183736-69-8 CAPLUS

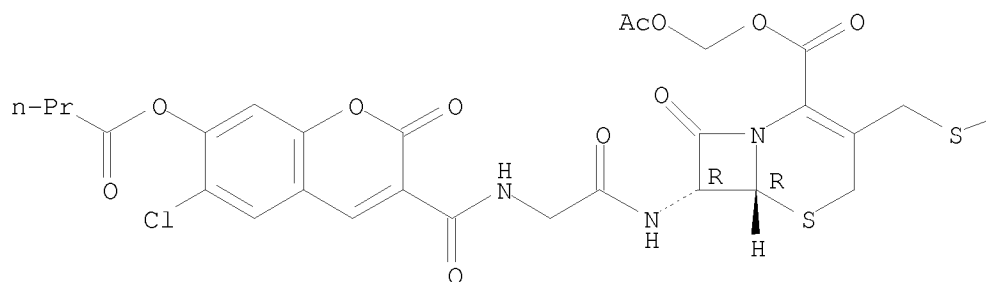
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
 (CA INDEX NAME)

Absolute stereochemistry.

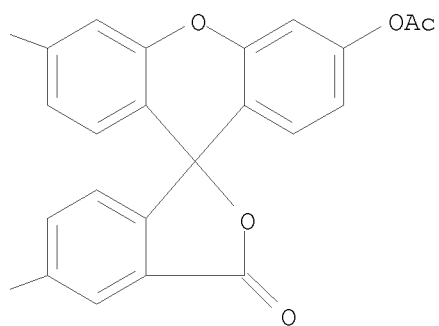


PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT: 9

THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

REFERENCE COUNT: 70

THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 47 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:165934 CAPLUS

DOCUMENT NUMBER: 134:204738

TITLE: Quenchers for fluorescence assays to reduce undesirable light emission

INVENTOR(S): Knapp, Tom; Zlokarnik, Gregor; Negulescu, Paul; Tsien, Roger Y.; Rink, Tim

PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA; Invitrogen Corp.

SOURCE: Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
EP 1081495	A1	20010307	EP 1999-117221	19990901 <--
EP 1081495	B1	20040310		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 261583	T	20040315	AT 1999-117221	19990901
PT 1081495	E	20040630	PT 1999-117221	19990901
ES 2214781	T3	20040916	ES 1999-117221	19990901
PRIORITY APPLN. INFO.:			EP 1999-117221	A 19990901

AB The present invention provides a method for reducing undesirable light emission from a sample using at least one photon producing agent and at least one photon reducing agent (e.g. dye-based photon reducing agents). The present invention further provides a method for reducing undesirable light emission from a sample (e.g., a biochem. or cellular sample) with at least one photon producing agent and at least one collisional quencher. The present invention also provides a method for reducing undesirable light emission from a sample (e.g., a biochem. or cellular sample) with at least one photon producing agent and at least one quencher, such as an electronic quencher. The present invention also provides a system and method of screening test chems. in fluorescent assays using photon reducing agents. The present invention also provides compns., pharmaceutical compns., and kits for practicing these methods.

IT 183736-69-8, CCF 2AM

RL: ARU (Analytical role, unclassified); PRP (Properties); ANST (Analytical study)

(quenchers for fluorescence assays to reduce undesirable light emission)

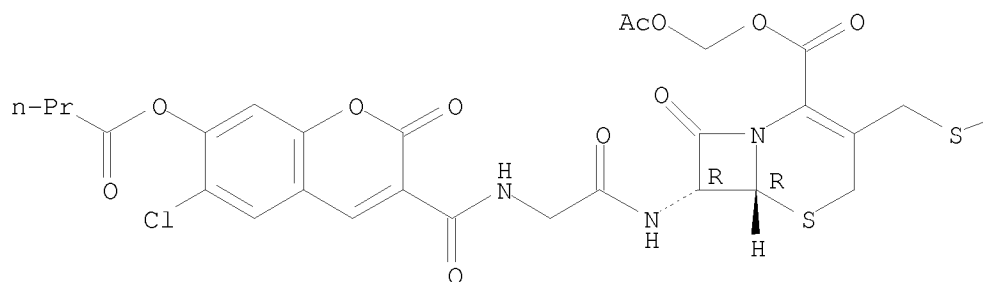
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-(CA INDEX NAME)

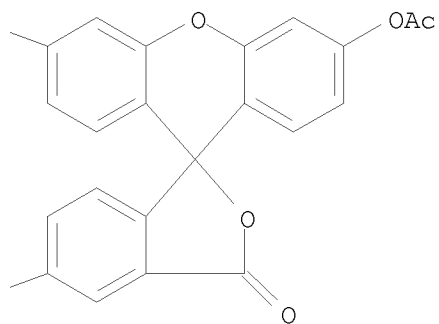
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B

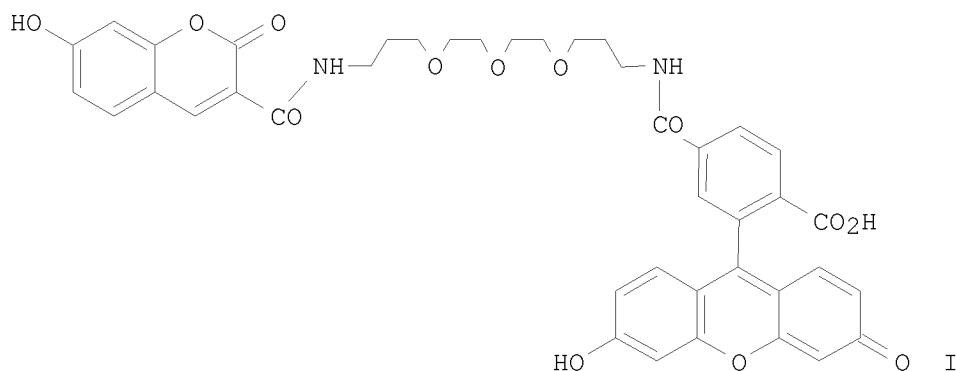


REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 48 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2001:61804 CAPLUS  
 DOCUMENT NUMBER: 134:222937  
 TITLE: Intramolecular Fluorescence Resonance Energy Transfer  
 System with Coumarin Donor Included in  
 $\beta$ -Cyclodextrin  
 AUTHOR(S): Takakusa, Hideo; Kikuchi, Kazuya; Urano, Yasuteru;  
 Higuchi, Tsunehiko; Nagano, Tetsuo  
 CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, The  
 University of Tokyo, Bunkyo-ku Tokyo, 113-0033, Japan  
 SOURCE: Analytical Chemistry (2001), 73(5), 939-942  
 CODEN: ANCHAM; ISSN: 0003-2700  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



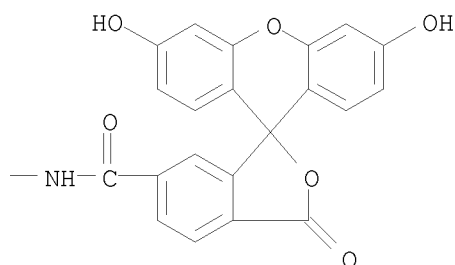
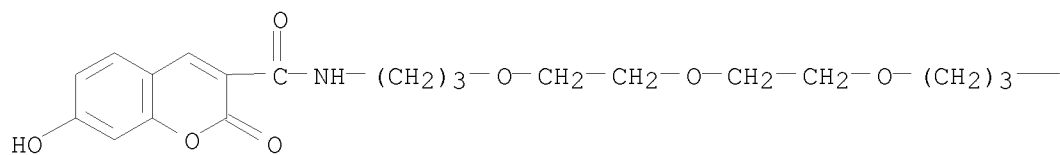
AB In aqueous solns., the fluorescence of the intramol. fluorescence resonance energy-transfer (FRET) system I was strongly quenched, because of close contact between the donor and acceptor moieties. FRET occurred, and the acceptor fluorescence was increased, by adding  $\beta$ -cyclodextrin ( $\beta$ -CD) to aqueous solns. of I. Spectral anal. supported the idea that the FRET enhancement was due to the formation of an inclusion complex of the coumarin moiety in  $\beta$ -CD, resulting in separation of the fluorophores. On the basis of this result, we propose that covalent binding of coumarin to  $\beta$ -CD will provide a FRET cassette mol. Applying this FRET system, various FRET probes that will be useful for ratio imaging and also the high-throughput screening will be provided.

IT 329328-79-2P 329328-80-5P 329328-81-6P  
 329328-82-7P 329328-83-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (intramol. fluorescence resonance energy transfer system with coumarin donor included in  $\beta$ -cyclodextrin)

RN 329328-79-2 CAPLUS

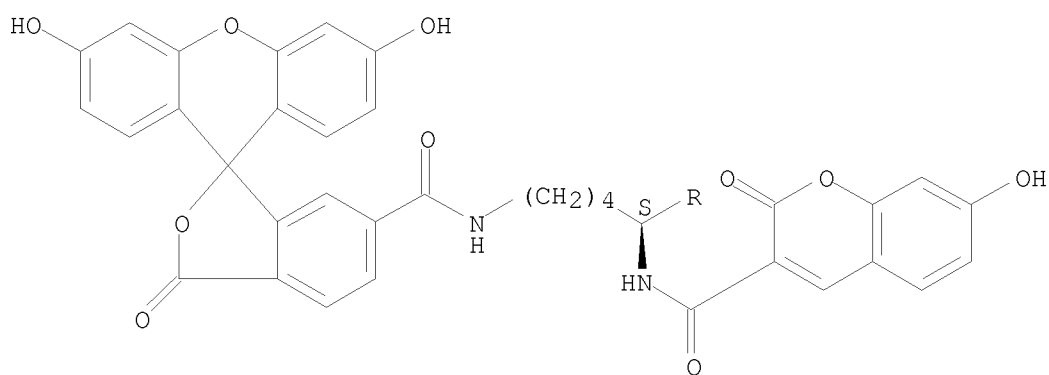
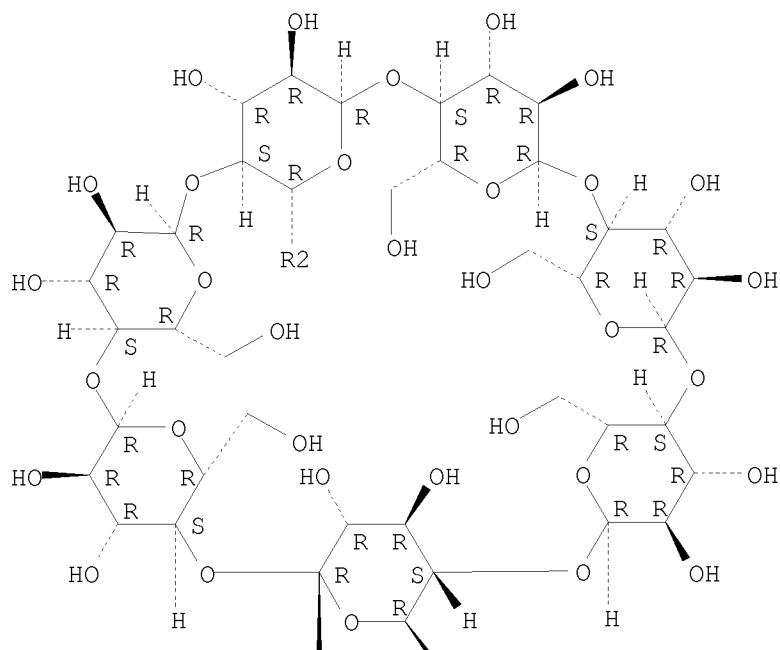
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-6-carboxamide,  
 3',6'-dihydroxy-N-[1-(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)-1-oxo-6,9,12-trioxa-2-azapentadec-15-yl]-3-oxo- (CA INDEX NAME)

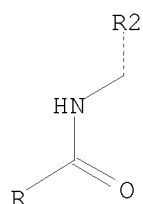


RN 329328-80-5 CAPLUS

CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[ (2S)-6-[[ (3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-2-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1-oxohexyl]amino]-(9CI) (CA INDEX NAME)

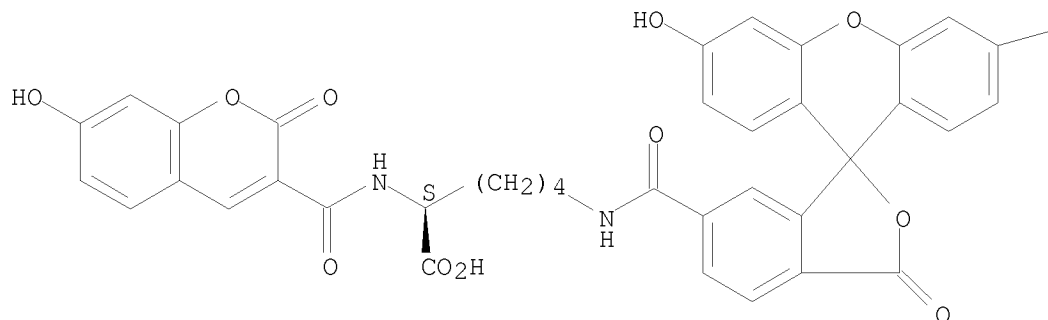
Absolute stereochemistry.





RN 329328-81-6 CAPLUS  
 CN L-Lysine, N6-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]-N2-[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

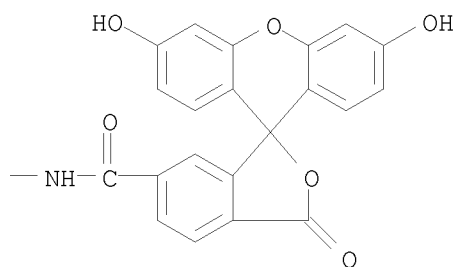
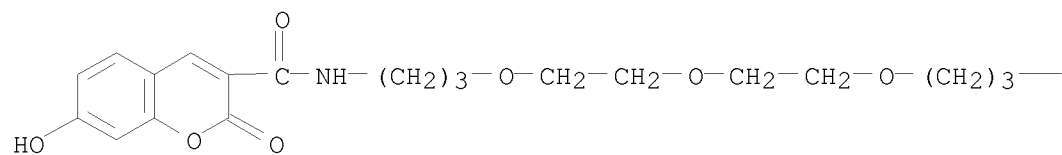


—OH

RN 329328-82-7 CAPLUS  
 CN  $\beta$ -Cyclodextrin, compd. with 3',6'-dihydroxy-N-[15-(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)-15-oxo-4,7,10-trioxa-14-azapentadec-1-yl]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-6-carboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 329328-79-2  
 CMF C41 H38 N2 O13



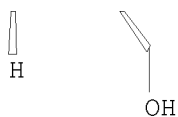
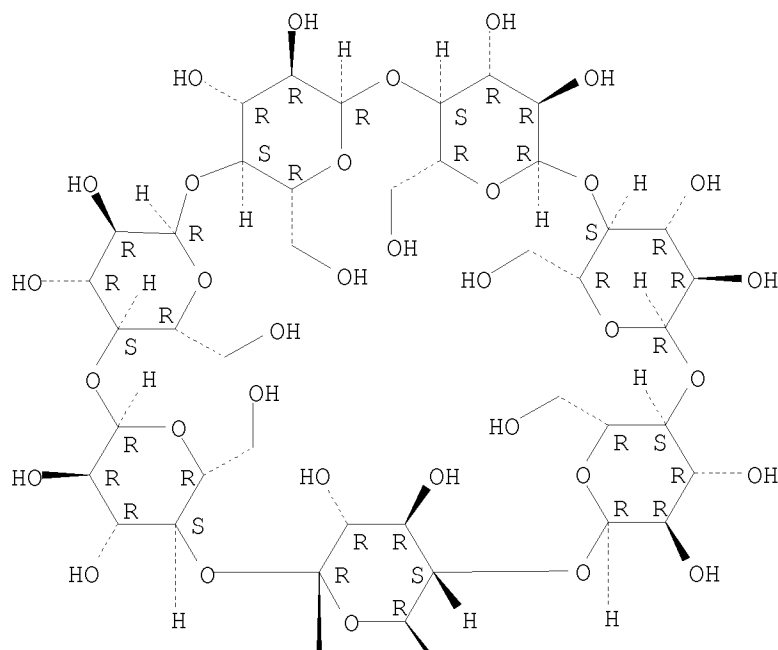
CM 2

CRN 7585-39-9

CMF C42 H70 O35

Absolute stereochemistry.

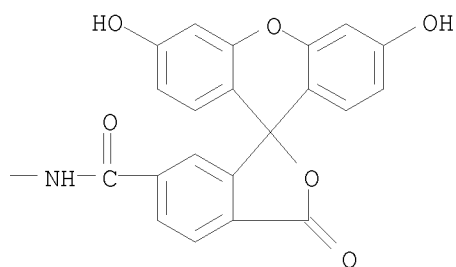
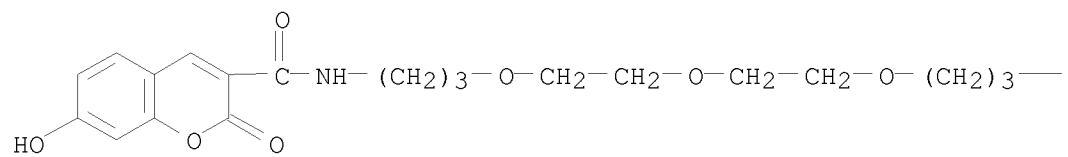




RN 329328-83-8 CAPLUS  
 CN  $\beta$ -Cyclodextrin, compd. with 3',6'-dihydroxy-N-[15-(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)-15-oxo-4,7,10-trioxa-14-azapentadec-1-yl]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-6-carboxamide (2:1) (9CI)  
 (CA INDEX NAME)

CM 1

CRN 329328-79-2  
 CMF C41 H38 N2 O13

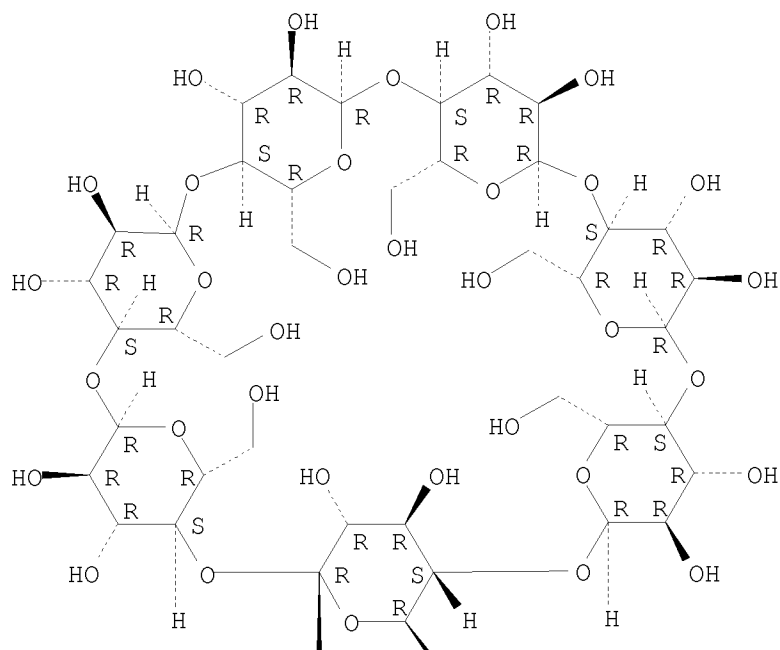


CM 2

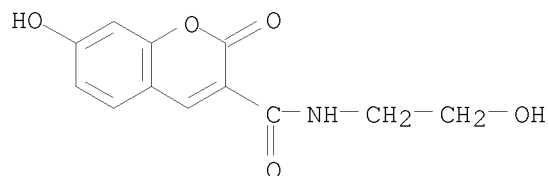
CRN 7585-39-9

CMF C42 H70 O35

Absolute stereochemistry.



IT 79050-06-9P 329328-84-9P 329328-85-0P  
 329328-86-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (intramol. fluorescence resonance energy transfer system with coumarin  
 donor included in  $\beta$ -cyclodextrin)  
 RN 79050-06-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-N-(2-hydroxyethyl)-2-oxo- (CA  
 INDEX NAME)



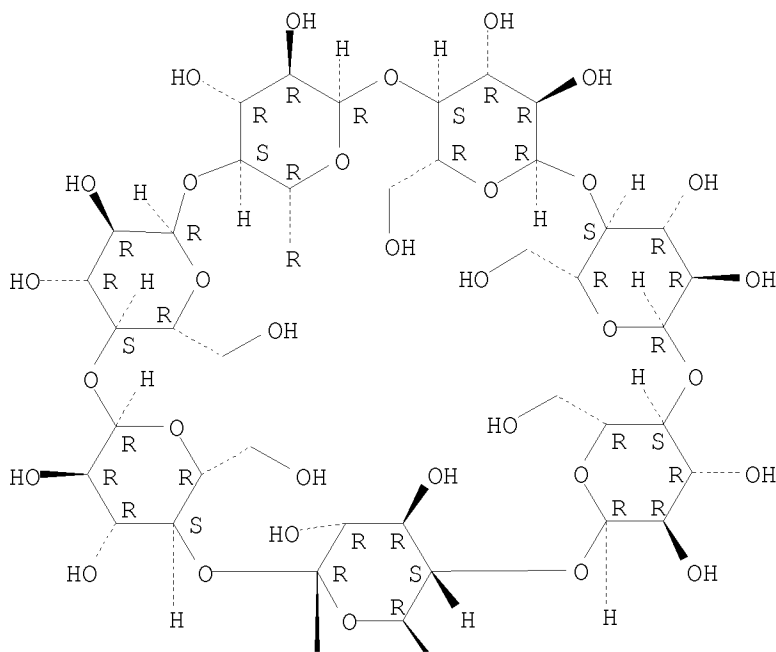
RN 329328-84-9 CAPLUS

10/513699

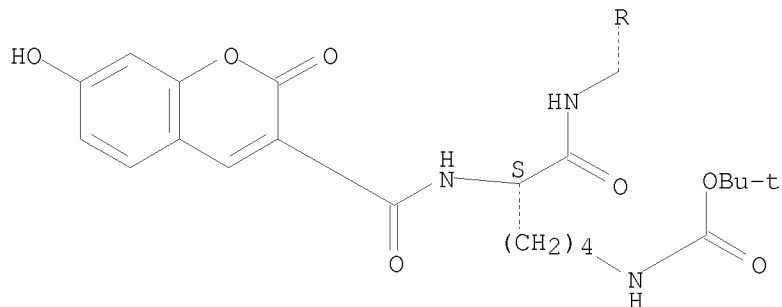
CN  $\beta$ -Cyclodextrin, 6A-deoxy-6A-[[ (2S)-6-[[ (1,1-dimethylethoxy)carbonyl]amino]-2-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1-oxohexyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



RN 329328-85-0 CAPLUS

CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[(7-hydroxy-2-oxo-2H-1-

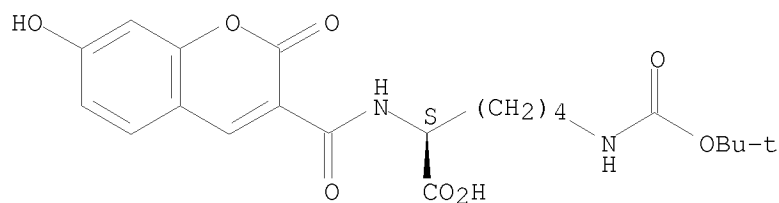
<12/04/2007>

Erich Leese

10/513699

benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

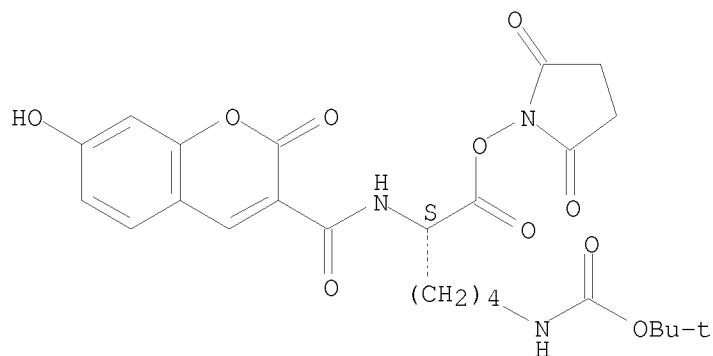
Absolute stereochemistry.



RN 329328-86-1 CAPLUS

CN Carbamic acid, [(5S)-6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-5-[[7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-6-oxohexyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 49 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:2798 CAPLUS

DOCUMENT NUMBER: 134:193689

TITLE: Synthesis and fluorescence properties of intramolecularly quenched fluorogenic p-nitroanilides containing coumarin or quinolinone derivatives as fluorophores

AUTHOR(S): Charitos, C.; Tzougraki, C.; Kokotos, G.

CORPORATE SOURCE: Department of Chemistry, University of Athens, Athens, 157 71, Greece

SOURCE: Journal of Peptide Research (2000), 56(6), 373-381

CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:193689

AB Nine model intramolecularly quenched fluorogenic substrates (IQFS) of the general structure F-Phe-NH-Np, containing coumarin or quinolinone derivs. as fluorophores (F) and the p-nitroanilide group (Np) as quencher, were synthesized. The study of the fluorescence properties of the substrates synthesized and the corresponding fluorophores showed that efficient quenching of fluorescence (>89%) was observed in all cases. The combination of 7-glutaryl-amido-4-methyl-coumarin (Mec-NH-Glt-OH) or 7-methoxy-4-coumarylacetic acid (Mca) with the p-nitroanilide group gave the best results (97.2 and 98.8% quenching, resp.). These fluorophores can be used to convert peptide p-nitroanilides into IQFS, which, retaining their chromogenic properties, may be applied in both fluorometric and colorimetric assays.

IT 182944-07-6P 328026-86-4P

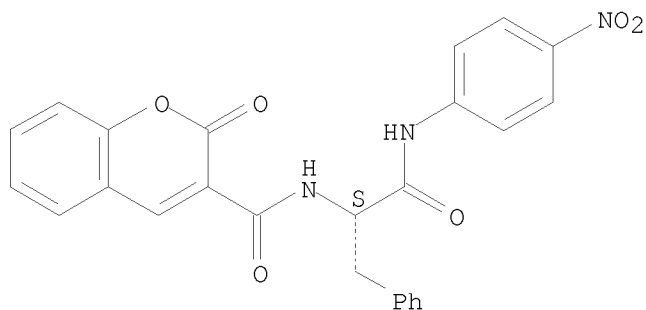
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation and fluorescence properties of fluorogenic nitroanilides containing coumarin or quinolinone derivs. as fluorophores)

RN 182944-07-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[(1S)-2-[(4-nitrophenyl)amino]-2-oxo-1-(phenylmethyl)ethyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

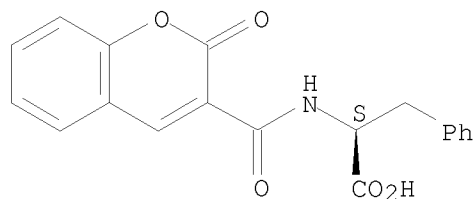


RN 328026-86-4 CAPLUS

CN L-Phenylalanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

10/513699

Absolute stereochemistry. Rotation (+).



OS.CITING REF COUNT:	6	THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT:	16	THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 50 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:186 CAPLUS

DOCUMENT NUMBER: 134:187834

TITLE: Coumarin and Chromen-4-one Analogues as Tautomerase Inhibitors of Macrophage Migration Inhibitory Factor: Discovery and X-ray Crystallography

AUTHOR(S): Orita, Masaya; Yamamoto, Satoshi; Katayama, Naoko; Aoki, Motonori; Takayama, Kazuhisa; Yamagiwa, Yoko; Seki, Norio; Suzuki, Hiroshi; Kurihara, Hiroyuki; Sakashita, Hitoshi; Takeuchi, Makoto; Fujita, Shigeo; Yamada, Toshimitsu; Tanaka, Akihiro

CORPORATE SOURCE: Yamanouchi Pharmaceutical Company Ltd., Tsukuba Science City, 305-8585, Japan

SOURCE: Journal of Medicinal Chemistry (2001), 44(4), 540-547

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Macrophage migration inhibitory factor (MIF) is a proinflammatory cytokine released from T-cells and macrophages. Although a detailed understanding of the biol. functions of MIF has not yet been clarified, it is known that MIF catalyzes the tautomerization of a nonphysiol. mol., D-dopachrome. Using a structure-based computer-assisted search of two databases of com. available compds., we have found 14 novel tautomerase inhibitors of MIF whose  $K_i$  values are in the range of 0.038-7.4  $\mu\text{M}$ . We also have determined the crystal structure of MIF complexed with the hit compound 1. It showed that the hit compound is located in the active site of MIF containing the N-terminal proline which plays an important role in the tautomerase reaction and forms several hydrogen bonds and undergoes hydrophobic interactions. A crystallog. study also revealed that there is a hydrophobic surface which consists of Pro-33, Tyr-36, Trp-108, and Phe-113 at the rim of the active site of MIF, and mol. modeling studies indicated that several more potent hit compds. have the aromatic rings which can interact with this hydrophobic surface. To our knowledge, our compds. are the most potent tautomerase inhibitors of MIF. One of these small, drug-like mols. has been cocrystd. with MIF and binds to the active site for tautomerase activity. Mol. modeling also suggests that the other hit compds. can bind in a similar fashion.

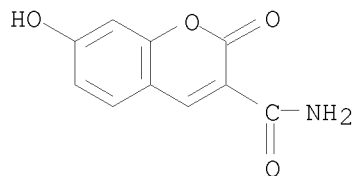
IT 19088-69-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(coumarin and chromen-4-one analogs as tautomerase inhibitors of macrophage migration inhibitory factor: discovery and X-ray crystallog.)

RN 19088-69-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-2-oxo- (CA INDEX NAME)





10/513699

OS.CITING REF COUNT:	47	THERE ARE 47 CAPLUS RECORDS THAT CITE THIS RECORD (47 CITINGS)
REFERENCE COUNT:	36	THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 51 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:910560 CAPLUS

DOCUMENT NUMBER: 134:222337

TITLE: A new pathway to 3-hetaryl-2-oxo-2H-chromenes: On the proposed mechanisms for the reaction of 3-carbamoyl-2-iminochromenes with dinucleophiles

AUTHOR(S): Kovalenko, Sergiy M.; Bylov, Igor E.; Sytnik, Konstantyn M.; Chernykh, Valentyn P.; Bilokin, Yaroslav V.

CORPORATE SOURCE: Department of Organic Chemistry, Ukrainian National Academy of Pharmacy, Kharkov, 61002, Ukraine

SOURCE: Molecules [online computer file] (2000), 5(10), 1146-1165

CODEN: MOLEFW; ISSN: 1420-3049

URL: <http://www.mdpi.org/molecules/papers/51001146.pdf>

PUBLISHER: Molecular Diversity Preservation International

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:222337

AB The present account summarizes the author's studies to elucidate the mechanisms of the recently reported rearrangements resulting from inter- and/or intramol. reactions of 2-imino-2H-chromene-3-carboxamides with different dinucleophiles.

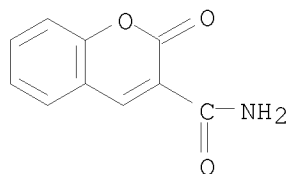
IT 1846-78-2P 73877-78-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(a new pathway to 3-heteroaryl-2-oxo-2H-chromenes and reaction mechanism of 3-carbamoyl-2-iminochromenes with dinucleophiles)

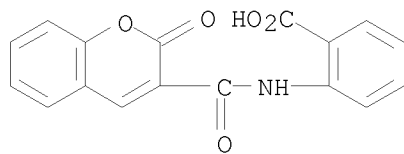
RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



RN 73877-78-8 CAPLUS

CN Benzoic acid, 2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 52 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:879325 CAPLUS

DOCUMENT NUMBER: 134:193316

TITLE: One-pot synthesis of  
N-(3-coumarinoyl)-N'-(salicylidene)hydrazines from  
3-ethoxycarbonyl(acyl)coumarinsAUTHOR(S): Nemeryuk, M. P.; Dimitrova, V. D.; Sedov, A. L.;  
Anisimova, O. S.; Traven, V. F.CORPORATE SOURCE: D. I. Mendeleev Russian Chemical Engineering  
University, Moscow, 125047, RussiaSOURCE: Chemistry of Heterocyclic Compounds (New  
York) (Translation of Khimiya Geterotsiklicheskikh  
Soedinenii) (2001), Volume Date 2000, 36(7),  
874-875

CODEN: CHCCAL; ISSN: 0009-3122

PUBLISHER: Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:193316

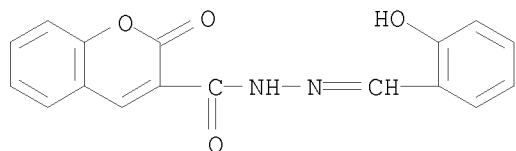
AB Coumarins bearing electron-acceptor groups at the 3 position react with  
malonic dihydrazide to yield 3-coumarincarbonyl salicylidenehydrazides  
through lactone ring opening.

IT 30866-42-3P 327613-96-7P 327613-97-8P

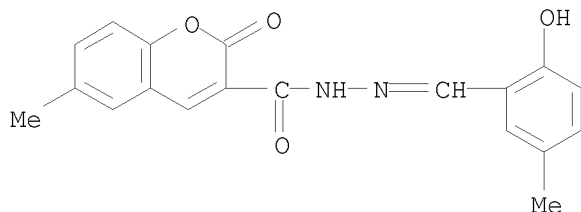
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of coumarincarbonyl salicylidenehydrazides from acylcoumarins)

RN 30866-42-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(2-hydroxyphenyl)methylene]hydrazide (CA INDEX NAME)

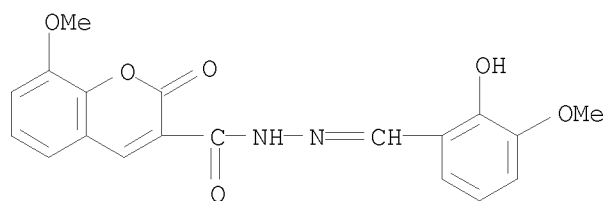
RN 327613-96-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-methyl-2-oxo-,  
2-[(2-hydroxy-5-methylphenyl)methylene]hydrazide (CA INDEX NAME)

RN 327613-97-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-[(2-hydroxy-3-methoxyphenyl)methylene]hydrazide (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 53 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:780224 CAPLUS

DOCUMENT NUMBER: 134:71458

TITLE: Synthesis and pharmacological evaluation of  
3,5-disubstituted indole-2-[N $\beta$ -(substituted  
benzopyran-2'-one-3'-carboxyl)]carboxy hydrazides and  
2H-3-(various substituted  
indol-3'-yl)methyl-1,3-benzothiazoles

AUTHOR(S): Mruthyunjayaswamy, B. H. M.; Shanthaveerappa, B. K.

CORPORATE SOURCE: Department of Chemistry, Gulbarga University,  
Gulbarga, 585 106, India

SOURCE: Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (2000  
) , 39B(6), 433-439

CODEN: IJSBDB; ISSN: 0376-4699

PUBLISHER: National Institute of Science Communication, CSIR

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:71458

AB Equimolar quantities of 3,5-disubstituted indole-2-carboxy hydrazides and  
di-Et malonate when refluxed in dry xylene for 10h afford  
3,5-disubstituted indole-2-[N $\beta$ -mono(carbethoxy malonyl)]carboxy  
hydrazides, which on reaction with Bz-substituted salicylaldehydes in  
ethanol under reflux conditions in the presence of catalytic amount of  
piperidine for 5hr give 3,5-disubstituted indole-2-[N $\beta$ -(substituted  
benzopyran-2'-one-3'-carboxyl)]carboxy hydrazides. 2-(Various substituted  
indol-3'-yl)methyliminothiophenols have been synthesized by reacting  
various substituted indole-3-carboxaldehydes and o-aminothiophenol.  
Methyliminothiophenols on reduction with sodium borohydride followed by  
treatment with formaldehyde yield the desired 2H-3-(various substituted  
indol-3'-yl)methyl-1,3-benzothiazoles. All the newly synthesized compds.  
have been tested for their antimicrobial activity against E.coli,  
S.aureus, P.vulgaris and A.niger. Also compds. have been screened for  
their analgesic and antitachycardic activity. Some of the compds. exhibit  
significant activities.

IT	316156-19-1P	316156-20-4P	316156-21-5P
	316156-22-6P	316156-23-7P	316156-24-8P
	316156-25-9P	316156-26-0P	316156-27-1P
	316156-28-2P	316156-29-3P	316156-30-6P
	316156-31-7P	316156-32-8P	316156-33-9P
	316156-34-0P	316156-35-1P	316156-36-2P
	316156-37-3P	316156-38-4P	316156-39-5P
	316156-40-8P	316156-41-9P	316156-42-0P
	316156-43-1P	316156-44-2P	316156-45-3P
	316156-46-4P		

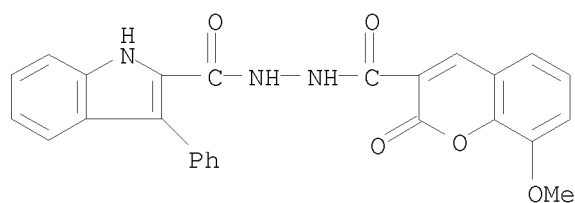
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
study); PREP (Preparation)

(synthesis and pharmacol. evaluation of disubstituted  
indole(substituted benzopyranonecarboxyl)carboxy hydrazides and  
(various substituted indolyl)methylbenzothiazoles)

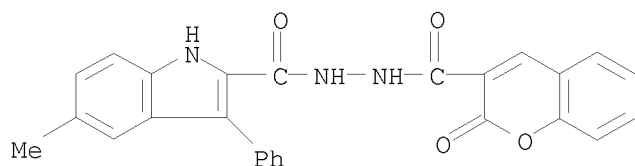
RN 316156-19-1 CAPLUS

CN 1H-Indole-2-carboxylic acid, 3-phenyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

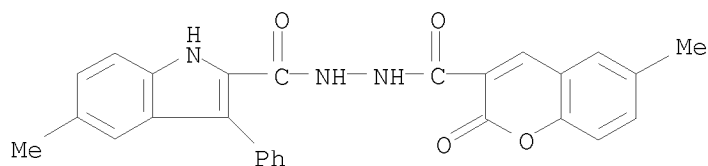
10/513699



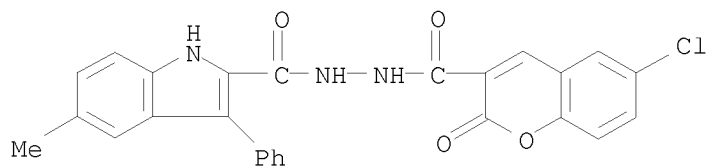
RN 316156-20-4 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-methyl-3-phenyl-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



RN 316156-21-5 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-methyl-3-phenyl-,  
2-[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

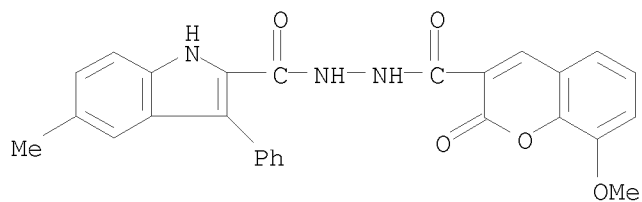


RN 316156-22-6 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-methyl-3-phenyl-,  
2-[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

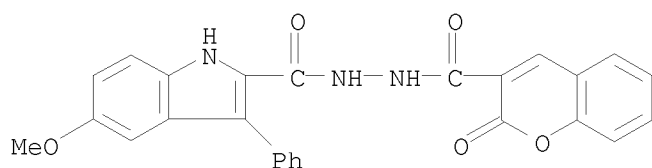


RN 316156-23-7 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-methyl-3-phenyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

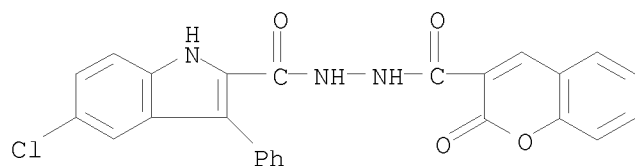
10/513699



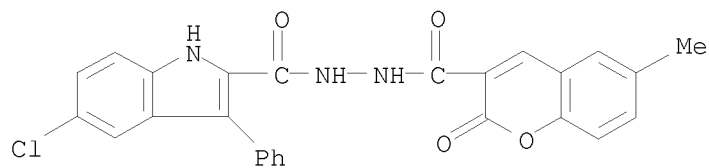
RN 316156-24-8 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-methoxy-3-phenyl-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



RN 316156-25-9 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-phenyl-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

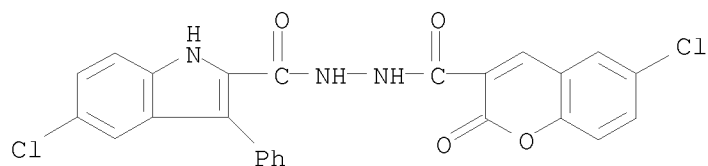


RN 316156-26-0 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-phenyl-,  
2-[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



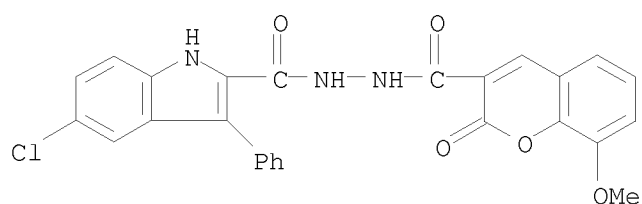
RN 316156-27-1 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-phenyl-,  
2-[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

10/513699



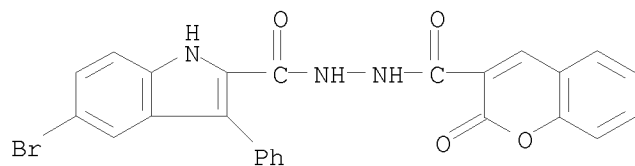
RN 316156-28-2 CAPLUS

CN 1H-Indole-2-carboxylic acid, 5-chloro-3-phenyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



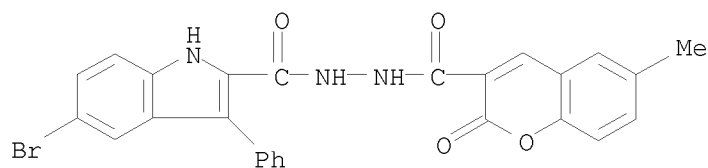
RN 316156-29-3 CAPLUS

CN 1H-Indole-2-carboxylic acid, 5-bromo-3-phenyl-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



RN 316156-30-6 CAPLUS

CN 1H-Indole-2-carboxylic acid, 5-bromo-3-phenyl-,  
2-[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

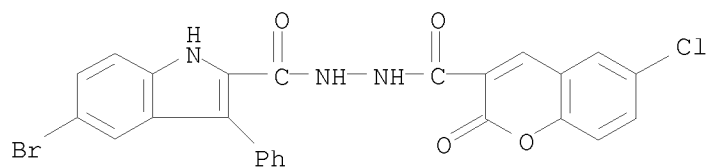


RN 316156-31-7 CAPLUS

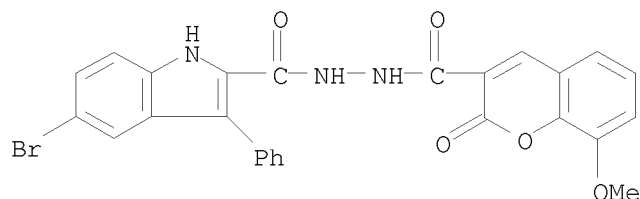
CN 1H-Indole-2-carboxylic acid, 5-bromo-3-phenyl-,  
2-[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



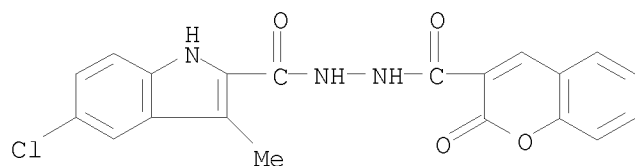
10/513699



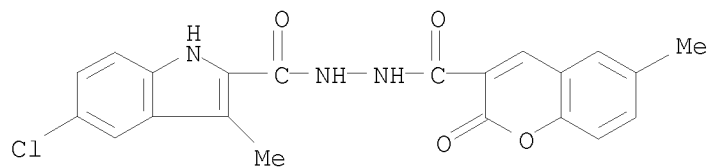
RN 316156-32-8 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-3-phenyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



RN 316156-33-9 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-methyl-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

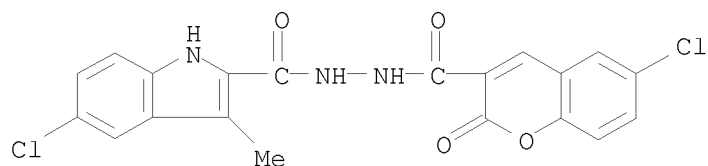


RN 316156-34-0 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-methyl-,  
2-[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

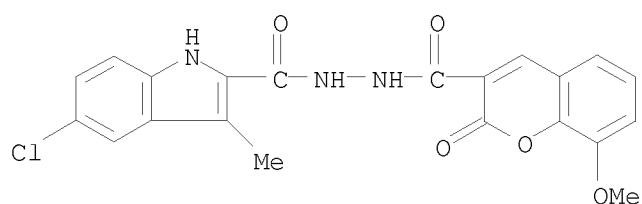


RN 316156-35-1 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-methyl-,  
2-[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

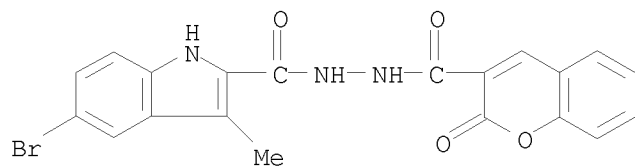
10/513699



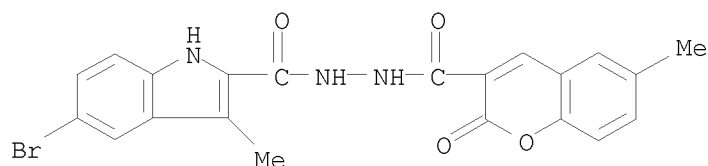
RN 316156-36-2 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-chloro-3-methyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



RN 316156-37-3 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-3-methyl-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

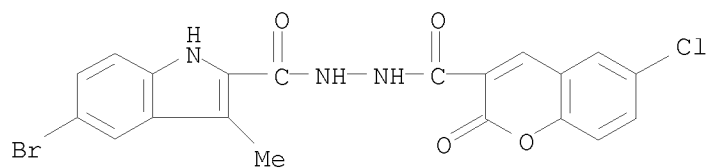


RN 316156-38-4 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-3-methyl-,  
2-[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

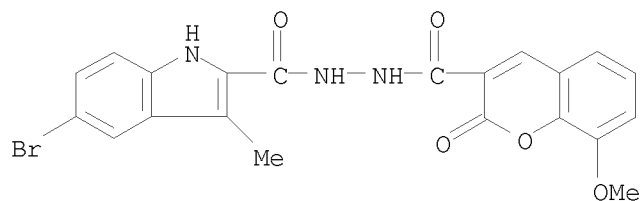


RN 316156-39-5 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-3-methyl-,  
2-[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

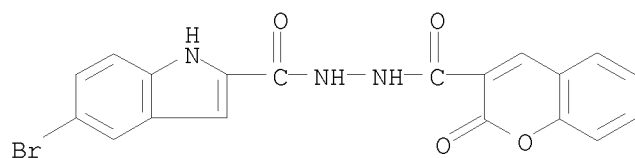
10/513699



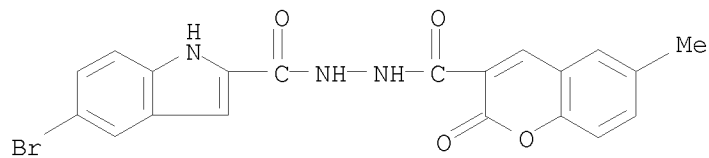
RN 316156-40-8 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-3-methyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



RN 316156-41-9 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)

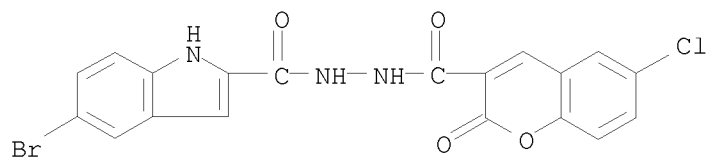


RN 316156-42-0 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-,  
2-[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

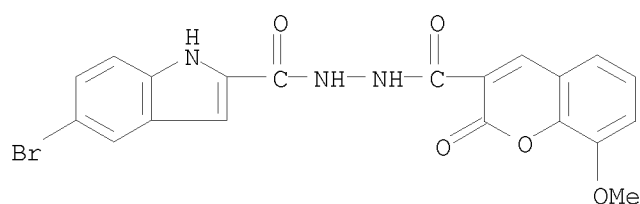


RN 316156-43-1 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-,  
2-[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)

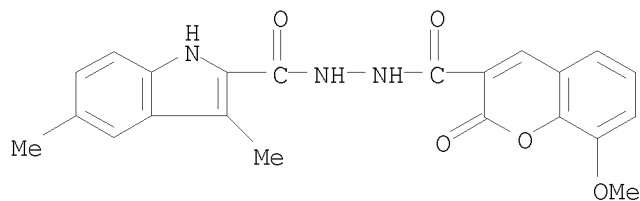
10/513699



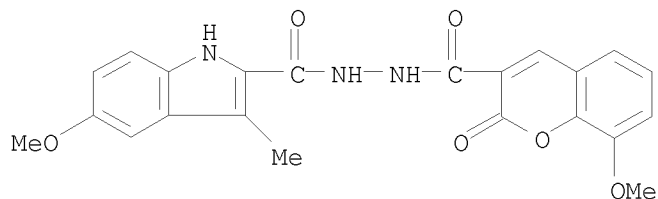
RN 316156-44-2 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-bromo-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



RN 316156-45-3 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 3,5-dimethyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



RN 316156-46-4 CAPLUS  
CN 1H-Indole-2-carboxylic acid, 5-methoxy-3-methyl-,  
2-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX  
NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)  
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS

<12/04/2007>

Erich Leese

10/513699

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese

L9 ANSWER 54 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:742058 CAPLUS  
 DOCUMENT NUMBER: 133:296663  
 TITLE: Preparation of peptides as caspase inhibitors  
 INVENTOR(S): Cai, Sui Xiong; Weber, Eckard; Wang, Yan; Mills, Gordon B.; Green, Douglas R.  
 PATENT ASSIGNEE(S): Cytovia, Inc., USA  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061542	A1	20001019	WO 2000-US9319	20000407 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2369619	A1	20001019	CA 2000-2369619	20000407 <--
EP 1177168	A1	20020206	EP 2000-921874	20000407 <--
EP 1177168	B1	20070530		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, AL, MK				
BR 2000009610	A	20020213	BR 2000-9610	20000407 <--
US 6355618	B1	20020312	US 2000-545565	20000407 <--
JP 2002541237	T	20021203	JP 2000-610819	20000407 <--
CN 1176941	C	20041124	CN 2000-807020	20000407
AT 363465	T	20070615	AT 2000-921874	20000407
MX 2001010127	A	20020820	MX 2001-10127	20011008 <--
US 20020058631	A1	20020516	US 2001-987417	20011114 <--
US 6716818	B2	20040406		
US 20040116355	A1	20040617	US 2003-721338	20031126
PRIORITY APPLN. INFO.:			US 1999-128545P	P 19990409
			US 1999-158370P	P 19991012
			US 2000-545565	A1 20000407
			WO 2000-US9319	W 20000407
			US 2001-987417	A3 20011114

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 133:296663

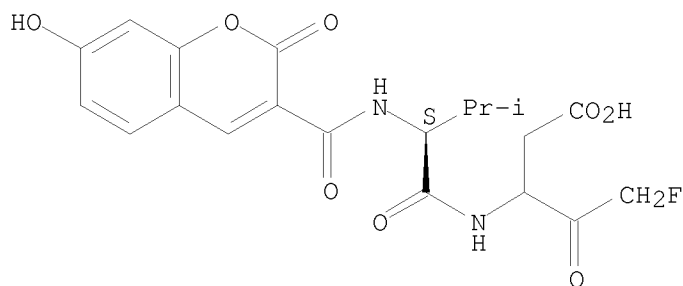
AB Dipeptides R3-X-CO-Y-NHCH(CH<sub>2</sub>CO<sub>2</sub>R<sub>1</sub>)COR<sub>2</sub> [R<sub>1</sub>, R<sub>2</sub> = H or optionally substituted alkyl; R<sub>3</sub> = alkyl, aryl, saturated or partially saturated carbocyclyl or heterocyclyl, or optionally substituted heteroaryl; X = O, S, NR<sub>4</sub>, (CR<sub>4</sub>R<sub>5</sub>)<sub>n</sub>, where R<sub>4</sub> and R<sub>5</sub> are H, alkyl, cycloalkyl and n is 0-3 or R<sub>3</sub> and R<sub>4</sub> may form a ring; Y is a residue of a natural or non-natural amino acid; provided that when X is O, then R<sub>3</sub> is not unsubstituted benzyl or tert-Bu and when X is CH<sub>2</sub>, then R<sub>3</sub> is not H] or their pharmaceutically acceptable salts or prodrugs were prepared as caspase inhibitors. Thus, 2-chlorobenzoyloxycarbonyl-Val-Asp-fmk (fmk = fluoromethyl ketone), prepared by acylation of tert-Bu 3-amino-5-fluoro-4-hydroxypentanoate with

10/513699

2-chlorobenzoyloxy-valine, followed by Dess-Martin oxidation and acid-catalyzed ester cleavage, showed IC<sub>50</sub> = 36 nM for inhibition of caspase-3.

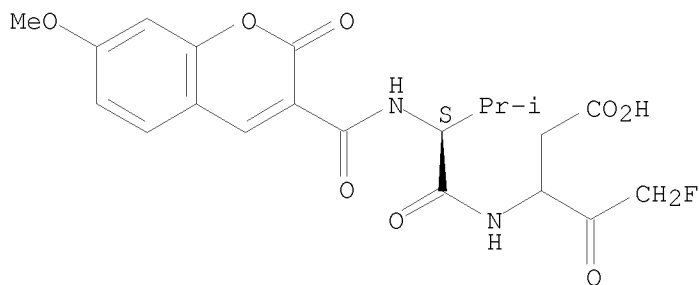
IT	301346-02-1P	301346-03-2P	301346-04-3P
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)		
	(preparation of peptides as caspase inhibitors)		
RN	301346-02-1	CAPLUS	
CN	Pentanoic acid, 5-fluoro-3-[[ (2S)-2-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (CA INDEX NAME)		

Absolute stereochemistry.



RN	301346-03-2	CAPLUS
CN	Pentanoic acid, 5-fluoro-3-[[ (2S)-2-[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (CA INDEX NAME)	

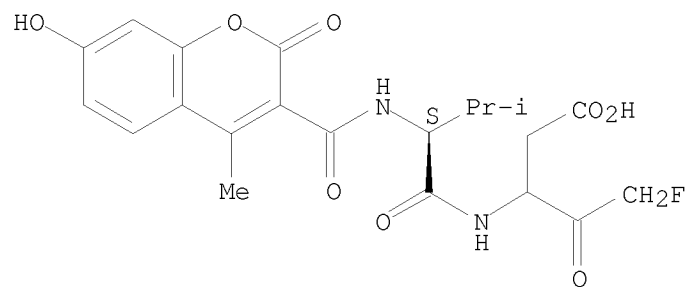
Absolute stereochemistry.



RN	301346-04-3	CAPLUS
CN	Pentanoic acid, 5-fluoro-3-[[ (2S)-2-[[ (7-hydroxy-4-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-1-oxobutyl]amino]-4-oxo- (CA INDEX NAME)	

Absolute stereochemistry.

10/513699



OS.CITING REF COUNT:	12	THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT:	1	THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 55 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:715655 CAPLUS

DOCUMENT NUMBER: 133:296850

TITLE: Photosensitive aromatic diamines and their use as monomers for polyimide resins curable by heat and light

INVENTOR(S): Okada, Koshi; Nojiri, Hitoshi

PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000281783	A	20001010	JP 1999-90936	19990331 <--
JP 2006089492	A	20060406	JP 2005-295907	20051011
PRIORITY APPLN. INFO.:			JP 1999-90936	A3 19990331

OTHER SOURCE(S): MARPAT 133:296850

AB The diamines are phenylenediamine compds. which bear substituents having photosensitive groups such as phenylbutadienyl, furanylethenyl, cinnamoylphenyl, styrylphenyl, etc. Thus, heating the mixture of 115.3 g 3,5-dinitrobenzoic acid chloride and 112.1 g 2'-hydroxychalcone in 1500 mL MEK and 80 g pyridine at 60° for 2 h gave 193 g 2'-(3,5-dinitrobenzoate)chalcone which was converted to 2'-(3,5-diaminobenzoate)chalcone and heated with 2,2-bis(4-hydroxyphenyl)propane dibenzoate 3,3',4,4'-tetracarboxylic dianhydride in the presence of picoline and Ac2O in AcNMe2 at 120° to give a polyimide with weight-average mol. weight 100,000.

IT 301165-62-8P 301165-64-0P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)  
(photosensitive aromatic diamines and use as monomers for polyimide resins curable by heat and light)

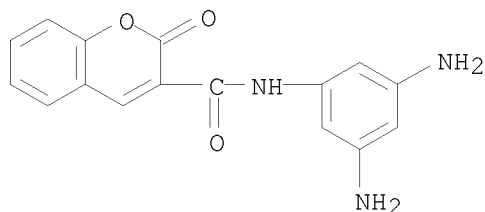
RN 301165-62-8 CAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-,  
(1-methylethylidene)di-4,1-phenylene ester, polymer with  
N-(3,5-diaminophenyl)-2-oxo-2H-1-benzopyran-3-carboxamide (9CI) (CA INDEX NAME)

CM 1

CRN 301165-60-6

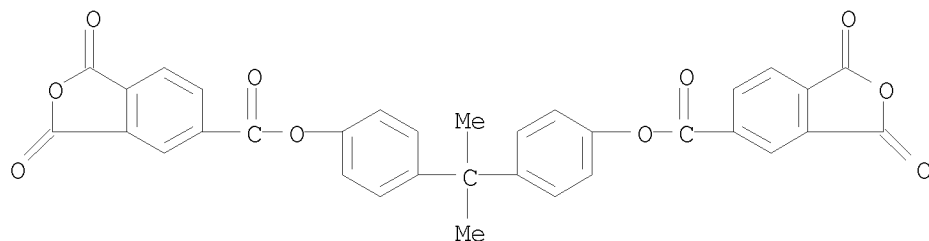
CMF C16 H13 N3 O3



10/513699

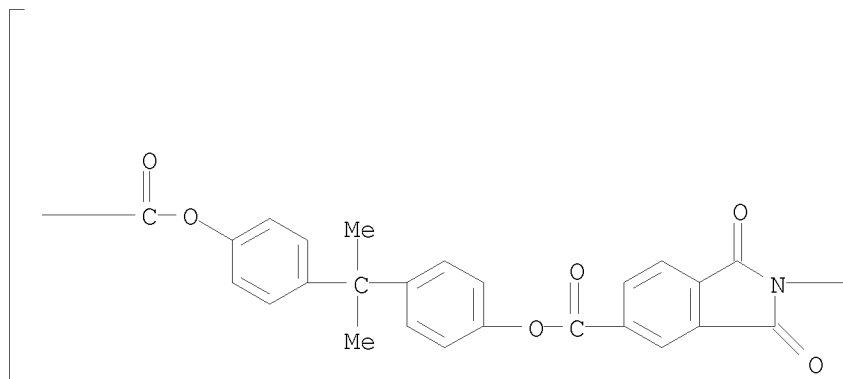
CM 2

CRN 2770-50-5  
CMF C33 H20 O10



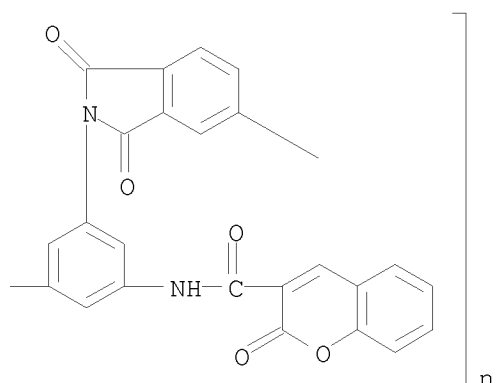
RN 301165-64-0 CAPLUS  
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)[5-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1,3-phenylene](1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A

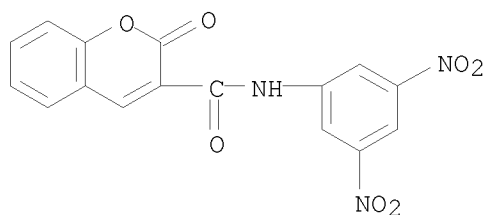


<12/04/2007>

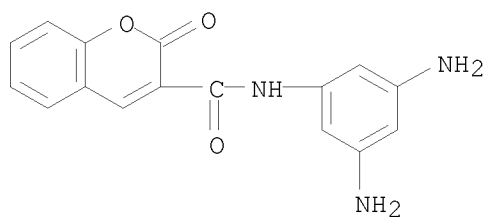
Erich Leese



IT 301165-58-2P 301165-60-6P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (precursor of diamine; photosensitive aromatic diamines and use as  
 monomers for polyimide resins curable by heat and light)  
 RN 301165-58-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(3,5-dinitrophenyl)-2-oxo- (CA INDEX  
 NAME)



RN 301165-60-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(3,5-diaminophenyl)-2-oxo- (CA INDEX  
 NAME)

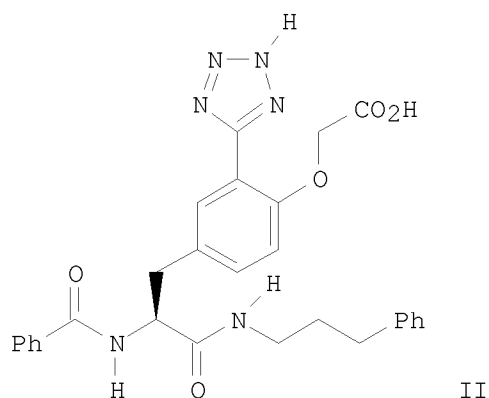


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
 (1 CITINGS)

10/513699

L9 ANSWER 56 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:645993 CAPLUS  
DOCUMENT NUMBER: 133:238324  
TITLE: Preparation of tyrosine amides and analogs as protein  
tyrosine phosphatase inhibitors  
INVENTOR(S): Larsen, Scott D.; May, Paul D.; Bleasdale, John E.;  
Liljebris, Charlotta; Schostarez, Heinrich Josef;  
Barf, Tjeerd; Nilsson, Marianne  
PATENT ASSIGNEE(S): Pharmacia and Upjohn AB, Swed.  
SOURCE: PCT Int. Appl., 124 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2000053583	A1	20000914	WO 2000-US6022	20000309 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,				
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,				
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,				
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,				
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6410585	B1	20020625	US 1999-265410	19990310 <--
CA 2366308	A1	20000914	CA 2000-2366308	20000309 <--
EP 1161421	A1	20011212	EP 2000-917793	20000309 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO				
JP 2002539115	T	20021119	JP 2000-604023	20000309 <--
AU 769511	B2	20040129	AU 2000-38711	20000309
PRIORITY APPLN. INFO.:			US 1999-265410	A 19990310
			US 1997-57730P	P 19970828
			US 1998-138642	A2 19980824
			WO 2000-US6022	W 20000309
OTHER SOURCE(S):	MARPAT 133:238324			
GI				



AB RZCH2CR1R2NHZ1R3 [I; R = OSO3H, OCH2CO2R4, OCH2CONHOH, N(CH2CO2R4)2, etc.; R1 = H, CH2OH, alkylcarbamoyl, etc.; R2 = H or Me; R4 = H or (phenyl)alkyl; Z = (un)substituted 1,4-phenylene; Z1 = CO or SO2] were prepared. Thus, (S)-Me2CO2CNHCH(CO2H)CH2C6H3(OH)I-4,3 was amidated by Ph(CH2)4NH2 and the product converted in 5 steps to title compound II. Data for biol. activity of I were given.

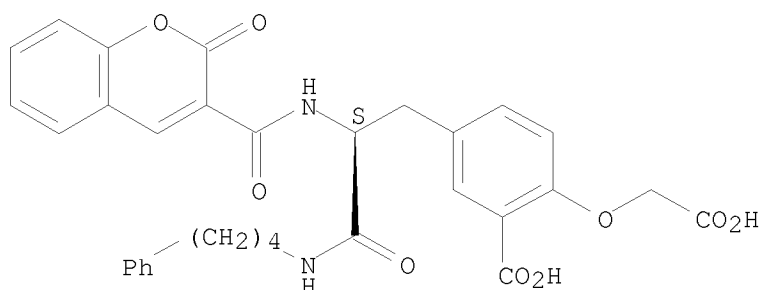
IT 292834-83-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tyrosine amides and analogs as protein tyrosine phosphatase inhibitors)

RN 292834-83-4 CAPLUS

CN Benzoic acid, 2-(carboxymethoxy)-5-[(2S)-3-oxo-2-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-3-[(4-phenylbutyl)amino]propyl]- (CA INDEX NAME)

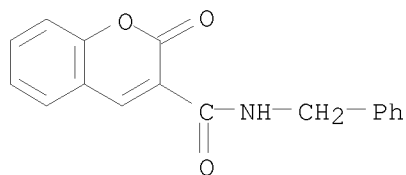
Absolute stereochemistry.



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	28	THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 57 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:643588 CAPLUS  
DOCUMENT NUMBER: 133:321683  
TITLE: Knoevenagel condensation of N,N'-dibenzylmalonamide  
with aromatic aldehydes  
AUTHOR(S): Bezuglyi, P. A.; Georgiyants, V. A.; Rakhimova, M. V.  
CORPORATE SOURCE: Ukrainian Pharmaceutical Academy, Kharkov, 310002,  
Ukraine  
SOURCE: Russian Journal of Organic Chemistry (Translation of  
Zhurnal Organicheskoi Khimii) (2000), 36(3),  
396-398  
CODEN: RJOCEQ; ISSN: 1070-4280  
PUBLISHER: MAIK Nauka/Interperiodica Publishing  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 133:321683  
AB Knoevenagel condensation of N,N'-dibenzylmalonamide with aromatic aldehydes  
yields the arylmethylenes. The reaction with salicylaldehyde  
results in formation of N-benzyl-2-oxochromene-3-carboxamide.  
IT 1846-90-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(Knoevenagel condensation of N,N'-dibenzylmalonamide with aromatic  
aldehydes)  
RN 1846-90-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 58 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:564497 CAPLUS

DOCUMENT NUMBER: 133:290640

TITLE: Synthesis and biological evaluation of CX-659S and its related compounds for their inhibitory effects on the delayed-type hypersensitivity reaction

AUTHOR(S): Tobe, M.; Isobe, Y.; Goto, Y.; Obara, F.; Tsuchiya, M.; Matsui, J.; Hirota, K.; Hayashi, H.

CORPORATE SOURCE: Pharmaceutical and Biotechnology Laboratory, Japan Energy Corporation, Saitama, 335-8502, Japan

SOURCE: Bioorganic &amp; Medicinal Chemistry (2000), 8(8), 2037-2047

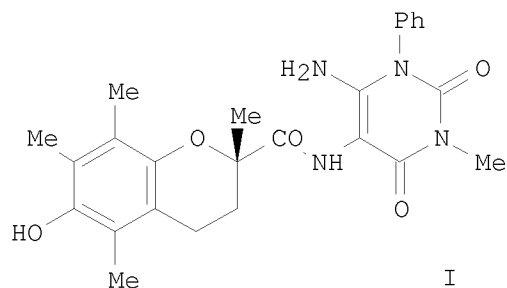
CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB In order to find novel nonsteroidal compds. possessing an inhibitory activity against delayed-type hypersensitivity (DTH) reactions, we conducted random screening using a picryl chloride (PC)-induced contact hypersensitivity reaction (CHR) in mice. Using a lead compound containing uracil and t-butylphenol moieties, we synthesized and evaluated an extensive series of 5-carboxamidouracil derivs. focused on both the uracil and the antioxidative moieties. Among them, we found that the hindered phenol moiety was necessary to exhibit the activities; compds. having the partial structure of vitamin E were found to exert potent activities against the DTH reaction by both oral and topical administration. Compound I (CX-659S) showed antioxidative activity against lipid peroxidn. with an IC<sub>50</sub> of 5.9  $\mu$ M. I was chosen as a candidate drug for the treatment of cutaneous disorders such as atopic dermatitis and allergic contact dermatitis.

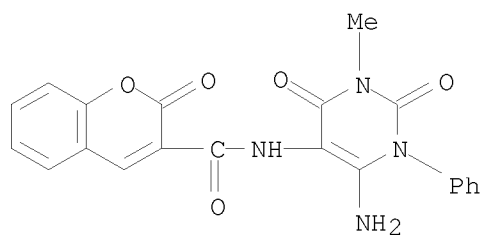
IT 301206-09-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(synthesis and biol. evaluation of carboxamidouracil derivs. for inhibitory effects on delayed-type hypersensitivity reaction)

RN 301206-09-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(6-amino-1,2,3,4-tetrahydro-3-methyl-2,4-dioxo-1-phenyl-5-pyrimidinyl)-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:	22	THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
REFERENCE COUNT:	32	THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 59 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:553352 CAPLUS

DOCUMENT NUMBER: 133:164326

TITLE: Preparation of amino acid thiazole derivatives and combinatorial libraries as antimicrobial agents

INVENTOR(S): Forood, Behrouz

PATENT ASSIGNEE(S): Trega Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 334 pp.

CODEN: PIXXD2

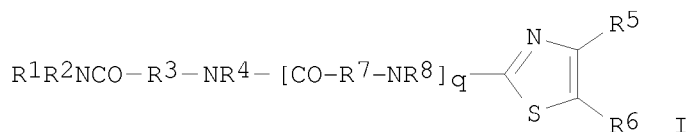
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000045635	A1	20000810	WO 2000-US3475	20000208 <--
W: AU, CA, JP, KR, NO				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1150565	A1	20011107	EP 2000-913425	20000208 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1999-246523	A 19990208
			US 2000-499419	A 20000207
			WO 2000-US3475	W 20000208
OTHER SOURCE(S):			MARPAT 133:164326	
GI				



AB Thiazole compds. I [ $q = 0, 1, 2$ ;  $R^1 = H$  or a functionalized resin;  $R^2 = H$ , (un)substituted alkyl, alkenyl, Ph, naphthyl, phenylalkyl, heteroaryl, or heterocyclyl or  $R^1R^2N = 1$ -piperazinyl, (aminomethyl)cyclohexylamino, (2-amino-3,5,5-trimethylcyclopentyl)methylamino, etc.;  $R^3 =$  (un)substituted alkylene, alkenylene, alkynylene, phenylene, naphthylene, heteroarylene, cycloalkylene, cycloalkenylene, cycloalkylalkylene, or phenylalkylene, etc.;  $R^4 = H$ , (un)substituted alkyl, alkenyl, phenylalkyl, alkylsulfonyl, acyl, phenylsulfonyl, alkylaminocarbonyl, or phenylaminocarbonyl or  $R^3$  and  $R^4$  form a heterocyclic ring;  $R^5, R^6 = H$ , (un)substituted alkyl, Ph, heteroaryl, acyl, alkoxycarbonyl, alkylaminocarbonyl, phenylaminocarbonyl, heterocyclyl, or naphthyl, carboxy, protected carboxy, an amino group or  $R^5$  and  $R^6$  are combined with the thiazole ring to form a fused ring system;  $R^7 =$  (un)substituted alkylene, phenylene, naphthylene, cycloalkylene, heteroarylene;  $R^8 = H$ , (un)substituted alkyl, alkenyl, phenylalkyl, alkylsulfonyl, acyl, phenylsulfonyl, alkylaminocarbonyl, or phenylaminocarbonyl] or their pharmaceutically acceptable salts were prepared as antimicrobial agents. The invention further relates to combinatorial libraries containing at least two or more such compds. and to methods of preparing combinatorial libraries

10/513699

composed of such compds. Thus, antimicrobial test data are tabulated for 214 thiazole compds., including N $\alpha$ -[4-(1-adamantyl)-2-thiazolyl]-N $\epsilon$ -acetyl-L-lysineamide.

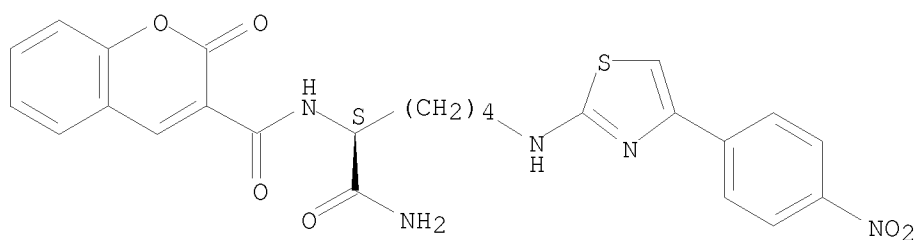
IT 288071-38-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of amino acid thiazole derivs. and combinatorial libraries as antimicrobial agents)

RN 288071-38-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[(1S)-1-(aminocarbonyl)-5-[[4-(4-nitrophenyl)-2-thiazolyl]amino]pentyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

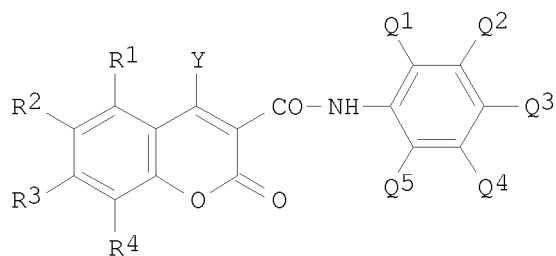


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 60 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:544733 CAPLUS  
 DOCUMENT NUMBER: 133:170290  
 TITLE: Optical recording medium using coumarin-type amides  
 INVENTOR(S): Ogiso, Akira; Tsukahara, Hiroshi; Nishimoto, Taizo;  
 Misawa, Tsutayoshi; Takuma, Keisuke  
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan;  
 Yamamoto Chemicals Inc.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000218940	A	20000808	JP 1999-25249	19990202 <--
PRIORITY APPLN. INFO.:			JP 1999-25249	19990202
OTHER SOURCE(S):	MARPAT 133:170290			
GI				



AB The medium involves a substrate, a reflecting layer, and an optical recording layer containing coumarin-type amides I [R1-R4 = H, halogen, (substituted) alkyl, aralkyl, aryl, alkenyl, alkoxy, aralkyloxy, aryloxy, alkenyloxy, alkylthio, aralkylthio, arylthio, alkenylthio, alkylamino, aralkylamino, arylamino, alkenylamino; R2-R4 may form rings; Q1-Q5 = H, halogen, cyano, NO2, (substituted) alkyl, aralkyl, aryl, alkoxy, aralkyloxy, aryloxy, alkenyl, alkenyloxy, alkylthio, aralkylthio, arylthio, alkenylthio, alkylamino, aralkylamino, arylamino, alkenylamino, acyl, alkoxy carbonyl, aralkyloxy carbonyl, aryloxy carbonyl, alkenyloxy carbonyl, alkylaminocarbonyl, aralkylaminocarbonyl, arylaminocarbonyl, alkenylaminocarbonyl, heterocycle, alkylsulfonyl, arylsulfonyl, arylazo; Y = H, halogen, cyano, (substituted) alkoxy carbonyl, aralkyloxy carbonyl, aryloxy carbonyl, alkenyloxy carbonyl, alkylaminocarbonyl, aralkylaminocarbonyl, arylaminocarbonyl, alkenylaminocarbonyl]. The recordable medium is suitable for recording by blue light (400-500 nm) laser.

IT	287920-70-1	287920-72-3	287920-74-5
	287920-76-7	287920-78-9	287920-80-3
	287920-81-4	287920-86-9	287920-87-0
	287920-88-1	287920-95-0	287920-96-1
	287920-97-2	287920-98-3	287920-99-4
	287921-00-0	287921-01-1	287921-02-2

10/513699

287921-03-3      287921-05-5      287921-06-6

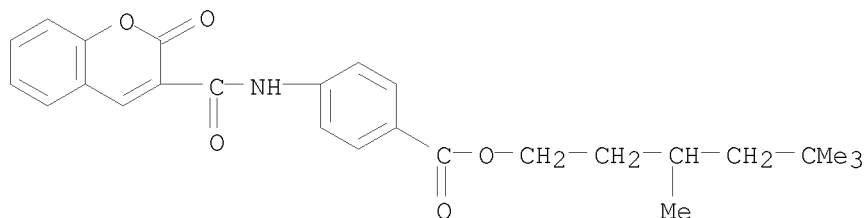
287921-09-9

RL: DEV (Device component use); USES (Uses)

(recordable optical disk using coumarin amide for blue light laser recording)

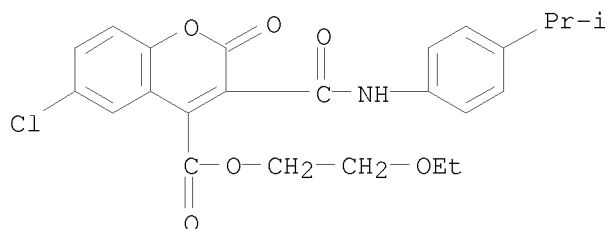
RN 287920-70-1 CAPLUS

CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 3,5,5-trimethylhexyl ester (CA INDEX NAME)



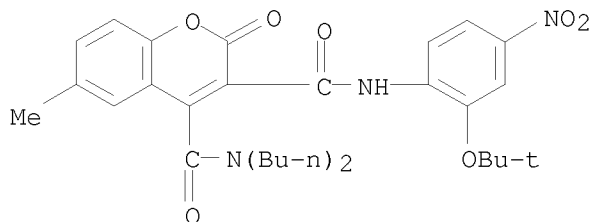
RN 287920-72-3 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid, 6-chloro-3-[[[4-(1-methylethyl)phenyl]amino]carbonyl]-2-oxo-, 2-ethoxyethyl ester (CA INDEX NAME)



RN 287920-74-5 CAPLUS

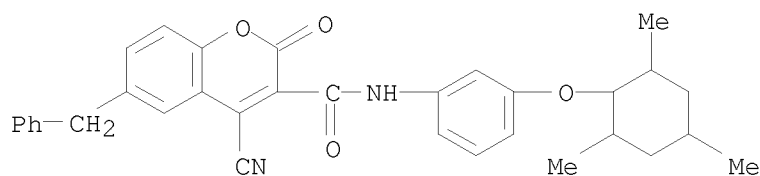
CN 2H-1-Benzopyran-3,4-dicarboxamide, N4,N4-dibutyl-N3-[2-(1,1-dimethylethoxy)-4-nitrophenyl]-6-methyl-2-oxo- (CA INDEX NAME)



RN 287920-76-7 CAPLUS

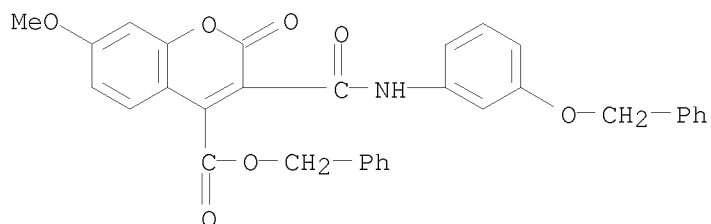
CN 2H-1-Benzopyran-3-carboxamide, 4-cyano-2-oxo-6-(phenylmethyl)-N-[3-[(2,4,6-trimethylcyclohexyl)oxy]phenyl]- (CA INDEX NAME)

10/513699



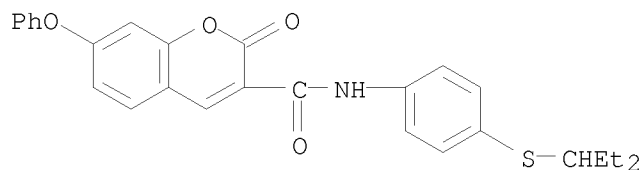
RN 287920-78-9 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid,  
7-methoxy-2-oxo-3-[[[3-(phenylmethoxy)phenyl]amino]carbonyl]-,  
phenylmethyl ester (CA INDEX NAME)



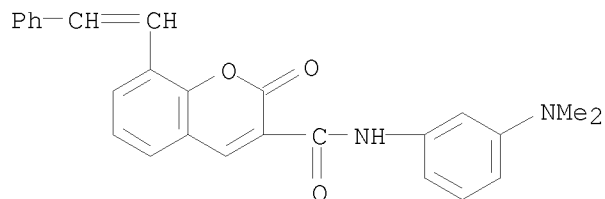
RN 287920-80-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(1-ethylpropyl)thio]phenyl]-2-oxo-7-  
phenoxy- (CA INDEX NAME)



RN 287920-81-4 CAPLUS

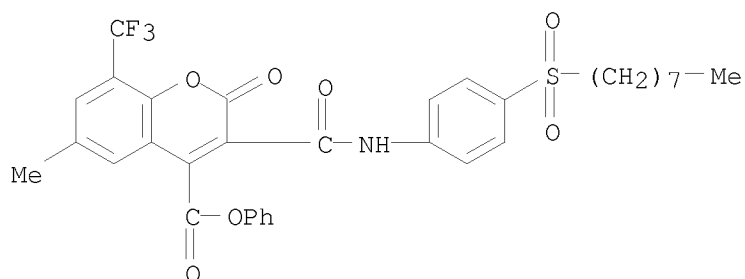
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(dimethylamino)phenyl]-2-oxo-8-(2-  
phenylethenyl)- (CA INDEX NAME)



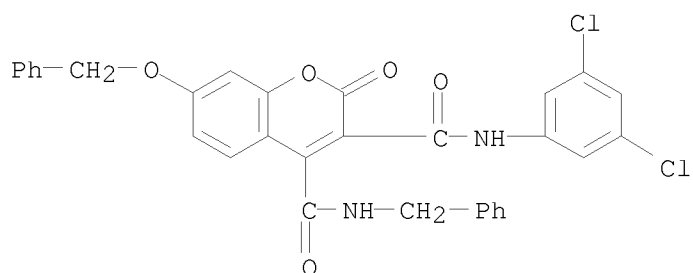
RN 287920-86-9 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid,  
6-methyl-3-[[[4-(octylsulfonyl)phenyl]amino]carbonyl]-2-oxo-8-  
(trifluoromethyl)-, phenyl ester (CA INDEX NAME)

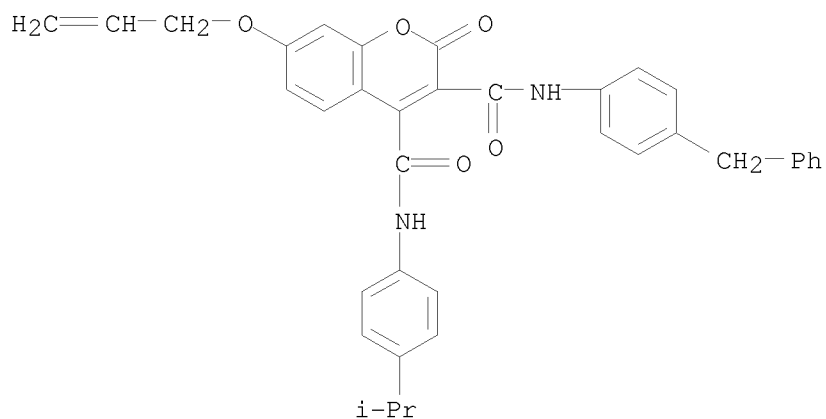
10/513699



RN 287920-87-0 CAPLUS  
CN 2H-1-Benzopyran-3,4-dicarboxamide,  
N3-(3,5-dichlorophenyl)-2-oxo-7-(phenylmethoxy)-N4-(phenylmethyl)- (CA  
INDEX NAME)

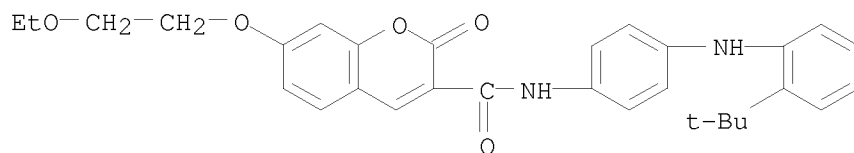


RN 287920-88-1 CAPLUS  
CN 2H-1-Benzopyran-3,4-dicarboxamide,  
N4-[4-(1-methylethyl)phenyl]-2-oxo-N3-[4-(phenylmethyl)phenyl]-7-(2-propen-  
1-yloxy)- (CA INDEX NAME)

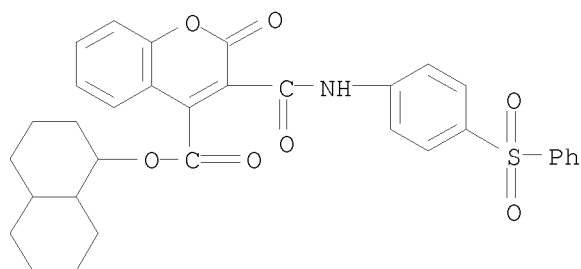


RN 287920-95-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[2-(1,1-  
dimethylethyl)phenyl]amino]phenyl]-7-(2-ethoxyethoxy)-2-oxo- (CA INDEX  
NAME)

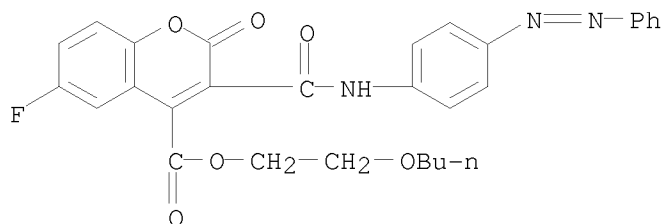
10/513699



RN 287920-96-1 CAPLUS  
CN 2H-1-Benzopyran-4-carboxylic acid,  
2-oxo-3-[[[4-(phenylsulfonyl)phenyl]amino]carbonyl]-,  
decahydro-1-naphthalenyl ester (CA INDEX NAME)

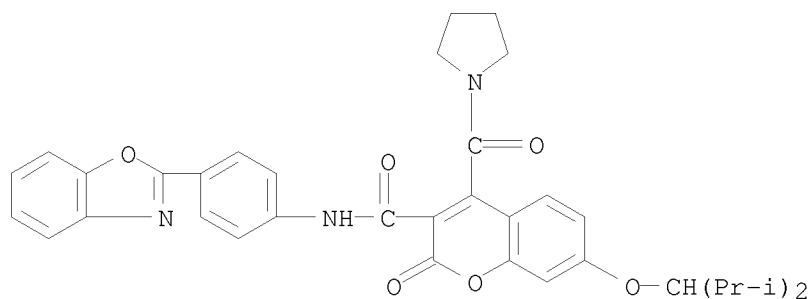


RN 287920-97-2 CAPLUS  
CN 2H-1-Benzopyran-4-carboxylic acid,  
6-fluoro-2-oxo-3-[[[4-(2-phenyldiazenyl)phenyl]amino]carbonyl]-,  
2-butoxyethyl ester (CA INDEX NAME)



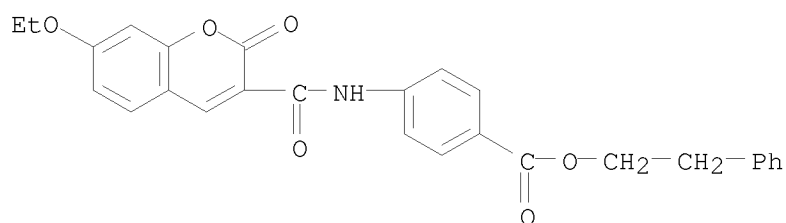
RN 287920-98-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2-benzoxazolyl)phenyl]-7-[2-methyl-1-(1-methylethyl)propoxy]-2-oxo-4-(1-pyrrolidinylcarbonyl)- (CA INDEX NAME)

10/513699



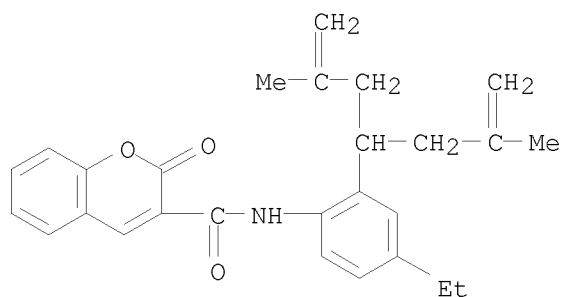
RN 287920-99-4 CAPLUS

CN Benzoic acid, 4-[[ (7-ethoxy-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-, 2-phenylethyl ester (CA INDEX NAME)



RN 287921-00-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-ethyl-2-[3-methyl-1-(2-methyl-2-propen-1-yl)-3-buten-1-yl]phenyl]-2-oxo- (CA INDEX NAME)

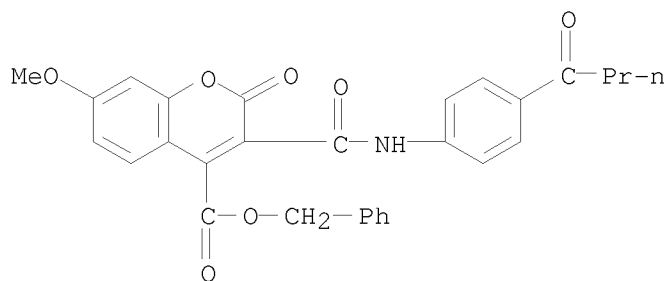


RN 287921-01-1 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid, 7-methoxy-2-oxo-3-[[[4-(1-oxobutyl)phenyl] amino] carbonyl]-, phenylmethyl ester (CA INDEX NAME)

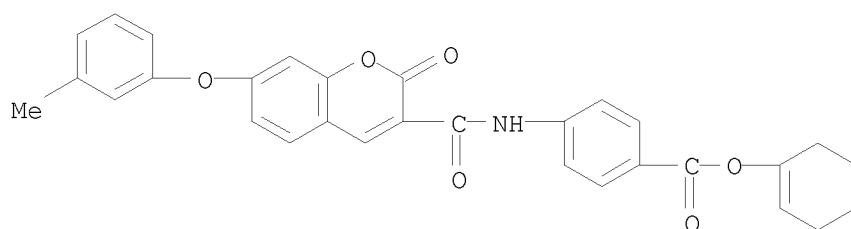


10/513699



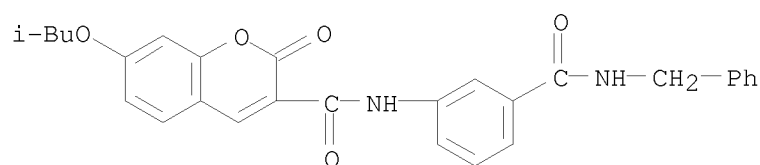
RN 287921-02-2 CAPLUS

CN Benzoic acid, 4-[[[7-(3-methylphenoxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, 1-cyclohexen-1-yl ester (CA INDEX NAME)



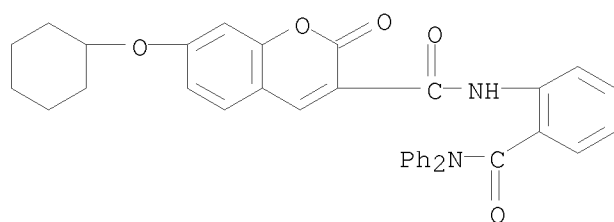
RN 287921-03-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(2-methylpropoxy)-2-oxo-N-[3-[(phenylmethyl)amino]carbonyl]phenyl]- (CA INDEX NAME)



RN 287921-05-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(cyclohexyloxy)-N-[2-[(diphenylamino)carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



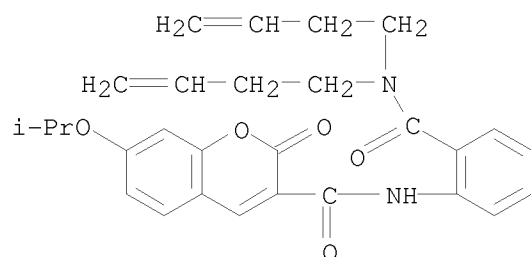
RN 287921-06-6 CAPLUS

<12/04/2007>

Erich Leese

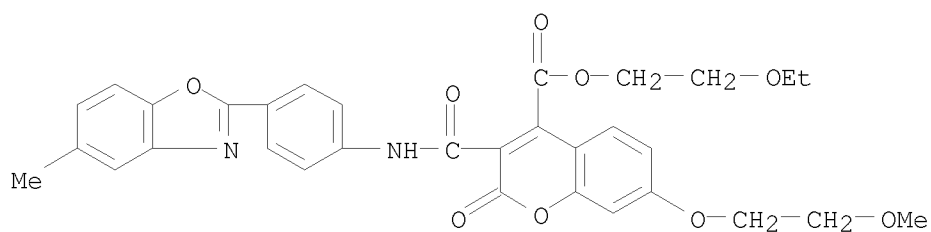
10/513699

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(di-3-buten-1-ylamino)carbonyl]phenyl]-7-(1-methylethoxy)-2-oxo- (CA INDEX NAME)



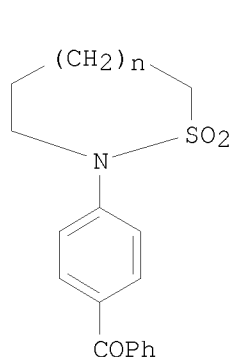
RN 287921-09-9 CAPLUS

CN 2H-1-Benzopyran-4-carboxylic acid,  
7-(2-methoxyethoxy)-3-[[[4-(5-methyl-2-benzoxazolyl)phenyl]amino]carbonyl]-  
2-oxo-, 2-ethoxyethyl ester (CA INDEX NAME)

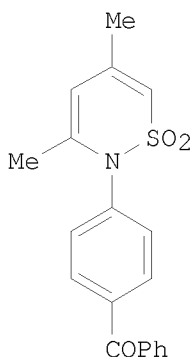


10/513699

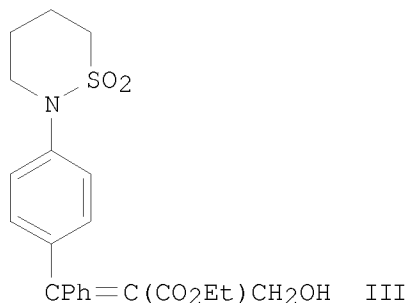
L9 ANSWER 61 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:527796 CAPLUS  
DOCUMENT NUMBER: 134:147551  
TITLE: Synthesis of sultam derivatives with expected  
biological activity. 15  
AUTHOR(S): Doss, S. H.; Baghos, V. B.; Abdelhamid, A. O.; Halim,  
M. M. A.  
CORPORATE SOURCE: National Research Center, Giza, Egypt  
SOURCE: Molecules [online computer file] (2000),  
5(6), 816-825  
CODEN: MOLEFW; ISSN: 1420-3049  
URL: <http://www.mdpi.org/molecules/papers/50600816.pdf>  
PUBLISHER: Molecular Diversity Preservation International  
DOCUMENT TYPE: Journal; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:147551  
GI



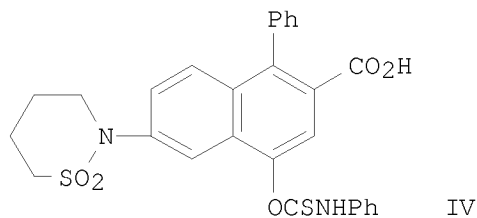
I



II



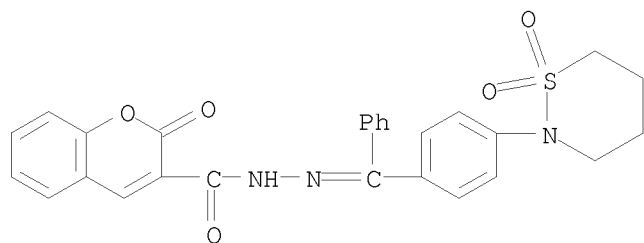
CPh=C(CO<sub>2</sub>Et)CH<sub>2</sub>OH III



IV

AB Sultams I ( $n = 0, 1$ ) and II were obtained from 4-aminobenzophenone and the appropriate reagents. Isomeric (E)- and (Z)-III and IV were also synthesized.  
IT 324043-64-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of sultam derivs. with expected biol. activity)  
RN 324043-64-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[phenyl[4-(tetrahydro-1,1-dioxido-2H-1,2-thiazin-2-yl)phenyl]methylene]hydrazide (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT:	15	THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 62 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:492070 CAPLUS

DOCUMENT NUMBER: 133:109955

TITLE: Amino acid derivatives and compositions therewith for delivering active agents

INVENTOR(S): Leone-Bay, Andrea; Ho, Koc-kan; Sarubbi, Donald J.; Leipold, Harry R.

PATENT ASSIGNEE(S): Emisphere Technologies, Inc., USA

SOURCE: U.S., 44 pp., Cont.-in-part of PCT 9736480.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 30

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6090958	A	20000718	US 1997-797816	19970207 <--
AT 357243	T	20070415	AT 1996-913778	19960401
EP 1792624	A1	20070606	EP 2007-4042	19960401
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, AL, LT, LV, SI				
ES 2284168	T3	20071101	ES 1996-913778	19960401
CZ 299295	B6	20080611	CZ 1997-3073	19960401
WO 9736480	A1	19971009	WO 1997-US5128	19970318 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2279331	A1	19980813	CA 1998-2279331	19980206 <--
CA 2319672	A1	19980813	CA 1998-2319672	19980206 <--
CA 2319680	A1	19980813	CA 1998-2319680	19980206 <--
WO 9834632	A1	19980813	WO 1998-US2619	19980206 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9862756	A	19980826	AU 1998-62756	19980206 <--
AU 738735	B2	20010927		
EP 993831	A2	20000419	EP 1999-117292	19980206 <--
EP 993831	A3	20010502		
EP 993831	B1	20080109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1015008	A1	20000705	EP 1998-905042	19980206 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1093819	A2	20010425	EP 2000-122704	19980206 <--
EP 1093819	A3	20030514		
EP 1093819	B1	20060503		

10/513699

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

JP 2001513080	T	20010828	JP 1998-535034	19980206 <--
NZ 337131	A	20010831	NZ 1998-337131	19980206 <--
AT 324907	T	20060615	AT 2000-122704	19980206
PT 1093819	E	20060929	PT 2000-122704	19980206
AT 383169	T	20080115	AT 1999-117292	19980206
PT 993831	E	20080212	PT 1999-117292	19980206
MX 9907290	A	20000531	MX 1999-7290	19990806 <--
NZ 507275	A	20011130	NZ 2000-507275	20001003 <--
NZ 507276	A	20020201	NZ 2000-507276	20001003 <--
JP 2001131090	A	20010515	JP 2000-311231	20001011 <--
JP 3964613	B2	20070822		
JP 2001139494	A	20010522	JP 2000-311230	20001011 <--
JP 4012679	B2	20071121		
AU 771024	B2	20040311	AU 2000-72261	20001214
AU 771434	B2	20040325	AU 2000-72260	20001214
HK 1037132	A1	20061103	HK 2001-107390	20011023
AU 2004202745	A1	20040923	AU 2004-202745	20040623
US 20050186176	A1	20050825	US 2005-104173	20050411
US 7417022	B2	20080826		
JP 2010018636	A	20100128	JP 2009-246865	20091027
PRIORITY APPLN. INFO.:			US 1996-17902P	P 19960329
			WO 1997-US5128	A2 19970318
			US 1995-414654	A 19950331
			US 1995-3111P	P 19950901
			EP 1996-913778	A3 19960401
			US 1997-796334	A 19970207
			US 1997-796335	A 19970207
			US 1997-796336	A 19970207
			US 1997-796337	A 19970207
			US 1997-796338	A 19970207
			US 1997-796339	A 19970207
			US 1997-796340	A 19970207
			US 1997-796341	A 19970207
			US 1997-797100	A 19970207
			US 1997-797813	A 19970207
			US 1997-797816	A 19970207
			US 1997-797817	A 19970207
			US 1997-797820	A 19970207
			US 1997-820694	A1 19970318
			AU 1998-62756	A3 19980206
			CA 1998-2279331	A3 19980206
			EP 1998-905042	A3 19980206
			EP 1999-117292	A3 19980206
			JP 1998-535034	A3 19980206
			NZ 1998-337131	A1 19980206
			WO 1998-US2619	W 19980206
			AU 2000-72260	A3 20001214
			US 2001-5511	A1 20011107

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

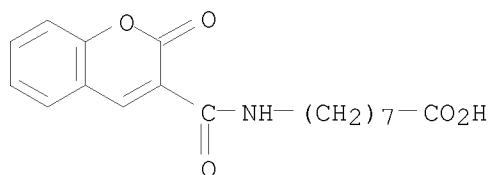
AB Carrier compds., especially amino acid derivs., and compns. therewith which are useful in the delivery of active agents, e.g. peptides, mucopolysaccharides, carbohydrates, and lipids, are provided. Methods of administration and preparation are provided as well. An intracolonic dosing composition containing parathyroid hormone 25 µg/kg, 4-[4-(phenoxyacetyl)aminophenyl]butyric acid as carrier 100 mg/kg in 25%

<12/04/2007>

Erich Leese

10/513699

aqueous propylene glycol was prepared  
IT 204852-90-4P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid derivs. as drug carriers for biol. active components)  
RN 204852-90-4 CAPLUS  
CN Octanoic acid, 8-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
REFERENCE COUNT: 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 63 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:454842 CAPLUS

DOCUMENT NUMBER: 133:187587

TITLE: Coumarinic derivatives as mechanism-based inhibitors of  $\alpha$ -chymotrypsin and human leukocyte elastase

AUTHOR(S): Pochet, L.; Doucet, C.; Dive, G.; Wouters, J.; Masereel, B.; Reboud-Ravaux, M.; Pirotte, B.

CORPORATE SOURCE: FUNDP, Department of Pharmacy, University of Namur, Namur, B-50000, Belg.

SOURCE: Bioorganic &amp; Medicinal Chemistry (2000), 8(6), 1489-1501

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Novel coumarinic derivs. were synthesized and tested for their inhibitory potency toward  $\alpha$ -CT and HLE. Cycloalkyl esters and amides were found to be essentially inactive on both enzymes. On the opposite, aromatic esters strongly inactivated  $\alpha$ -CT whereas HLE was less efficiently inhibited with dichlorophenyl ester derivs. ( $k_{\text{inact}}/K_I=4000 \text{ M}^{-1} \text{ s}^{-1}$  for 36). Representative examples of amide, ester, thioester and ketone derivs. were prepared in order to evaluate the influence of the link between the coumarinic ring and the Ph side chain. The irreversible inactivation of  $\alpha$ -CT by 6-chloromethyl derivs. should be due to alkylation of a histidine residue as suggested by the amino acid anal. of the modified chymotrypsin. Conversely the inhibition of HLE was transient. Intrinsic reactivity of coumarins has been calculated using a model of a nucleophilic reaction between the ligand and the couple methanol-water. From this calcn., it appears that differences in the inhibitory potency expressed by these mols. cannot only be explained by differences in the reactivity of the lactonic carbonyl group toward the nucleophilic attack.

IT 288847-16-5P 288847-18-7P 288847-19-8P

288847-20-1P 288847-21-2P 288847-22-3P

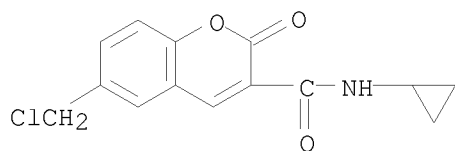
288847-23-4P 288847-30-3P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(coumarinic derivs. as mechanism-based enzyme inhibitors)

RN 288847-16-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-cyclopropyl-2-oxo- (CA INDEX NAME)

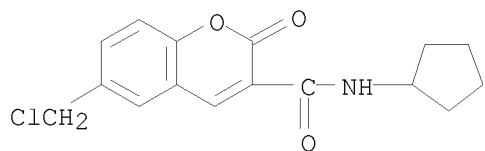


RN 288847-18-7 CAPLUS

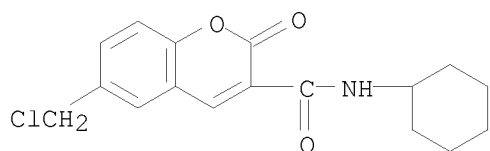
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-cyclopentyl-2-oxo- (CA INDEX NAME)



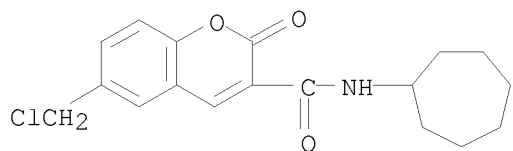
10/513699



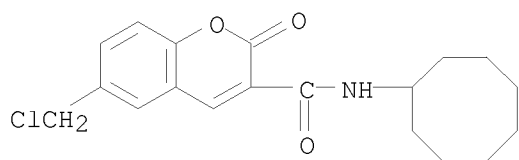
RN 288847-19-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-cyclopentyl-2-oxo- (CA  
INDEX NAME)



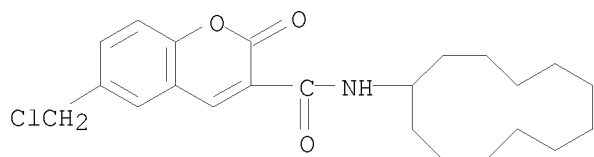
RN 288847-20-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-cycloheptyl-2-oxo- (CA  
INDEX NAME)



RN 288847-21-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-cyclooctyl-2-oxo- (CA  
INDEX NAME)



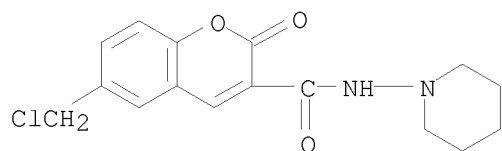
RN 288847-22-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-cyclododecyl-2-oxo- (CA  
INDEX NAME)



10/513699

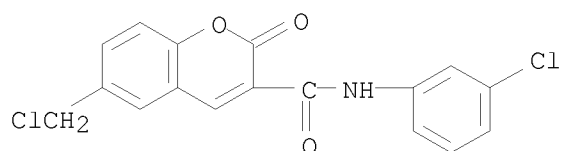
RN 288847-23-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-1-piperidinyl-  
(CA INDEX NAME)



RN 288847-30-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-(3-chlorophenyl)-2-oxo-  
(CA INDEX NAME)

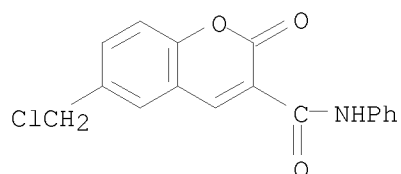


IT 176770-48-2P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (coumarinic derivs. as mechanism-based enzyme inhibitors)

RN 176770-48-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-phenyl- (CA INDEX NAME)

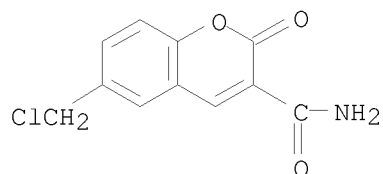


IT 288847-03-0D, derivs.

RL: BSU (Biological study, unclassified); BIOL (Biological study) (coumarinic derivs. as mechanism-based enzyme inhibitors)

RN 288847-03-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo- (CA INDEX NAME)



10/513699

OS.CITING REF COUNT:	29	THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)
REFERENCE COUNT:	42	THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 64 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:421124 CAPLUS  
 DOCUMENT NUMBER: 133:55311  
 TITLE: Optical molecular sensors for cytochrome P 450 activity  
 INVENTOR(S): Makings, Lewis; Zlokarnik, Gregor  
 PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA  
 SOURCE: PCT Int. Appl., 123 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035900	A1	20000622	WO 1999-US29439	19991210 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6143492	A	20001107	US 1999-301395	19990428 <--
US 6420130	B1	20020716	US 1999-301525	19990428 <--
CA 2352631	A1	20000622	CA 1999-2352631	19991210 <--
EP 1140888	A1	20011010	EP 1999-965226	19991210 <--
EP 1140888	B1	20030514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002532487	T	20021002	JP 2000-588160	19991210 <--
AT 240310	T	20030515	AT 1999-965226	19991210
PT 1140888	E	20030930	PT 1999-965226	19991210
ES 2199605	T3	20040216	ES 1999-965226	19991210
PRIORITY APPLN. INFO.:			US 1998-112252P	P 19981214
			US 1999-301395	A 19990428
			US 1999-301525	A 19990428
			WO 1999-US29439	W 19991210

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 133:55311

AB The invention provides compds. useful as an optical probes or sensors of the activity of at least one cytochrome P 450 enzyme, and methods of using the compds. to screen candidate drugs as well as candidate drugs identified by these methods. The optical probe of the invention is a compound having the generic structure Y-L-Q, wherein Y is selected from the group consisting of Q as herein defined, saturated C1-C20 alkyl, unsatd. C1-C20 alkenyl, unsatd. C1-C20 alkynyl, substituted saturated C1-C20 alkyl, substituted unsatd. C1-C20 alkenyl, substituted unsatd. C1-C20 alkynyl, C1-C20 cycloalkyl, C1-C20 cycloalkenyl, substituted saturated C1-C20 cycloalkyl, substituted unsatd. C1-C20 cycloalkenyl, aryl, substituted aryl, heteroaryl and substituted heteroaryl; L is selected from the group of (-OCR2H)p-, wherein for each p, all R2 are sep. selected from the group consisting of a hydrogen atom, saturated C1-C20 alkyl, unsatd. C1-C20 alkenyl, unsatd. C1-C20 alkynyl, substituted saturated C1-C20 alkyl, substituted unsatd. C1-C20 alkenyl, substituted unsatd. C1-C20 alkynyl, C1-C20

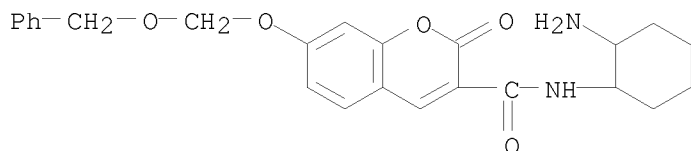
cycloalkyl, C1-C20 cycloalkenyl, substituted saturated C1-C20 cycloalkyl, substituted unsatd. C1-C20 cycloalkenyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, and p is a pos. integer no greater than twelve; and Q is a chemical moiety that gives rise to optical properties in its hydroxy or hydroxylate, phenol or phenoxide form that are different from the optical properties that arise from its ether form. Most preferably, p is one, R2 is hydrogen, and Q is the ether form of a phenoxide fluorophore such as a 7-hydroxycoumarin derivative, resorufin, or fluorescein. Thus, introduction of an oxyphenylmethyl spacer in currently available fluorogenic cytochrome P 450 sensors results in improved efficiency (kcat/Km) of turnover and improved optical properties, as demonstrated for a variety of structurally distinct substrates. Benzyl-oxymethylresorufin, for example, has a turnover rate with cytochrome P 450 3A4 that is .apprx.5-fold better (kcat of 0.5 s<sup>-1</sup>, Km of 1.9 μM) than that of benzylresorufin. Furthermore, solubilities of sensors of the invention in acetonitrile, as well as water, are excellent, overcoming one of the limitations of the currently available fluorogenic cytochrome P 450 substrates. Inhibition assays are provided for detecting the presence of cytochrome P 450 inhibitors.

IT 277309-44-1P

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(optical mol. sensors for cytochrome P 450 activity)

RN 277309-44-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminocyclohexyl)-2-oxo-7-[(phenylmethoxy)methoxy]- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)  
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 65 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:419060 CAPLUS

DOCUMENT NUMBER: 133:273888

TITLE: Covalent bonding of coumarin molecules to sol-gel matrices for organic light-emitting device applications

AUTHOR(S): Karkkainen, Ari H. O.; Hormi, Osmo E. O.; Rantala, Juha T.

CORPORATE SOURCE: VTT Electronics, Oulu, Finland

SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2000), 3943(Sol-Gel Optics V), 194-209

CODEN: PSISDG; ISSN: 0277-786X

PUBLISHER: SPIE-The International Society for Optical Engineering

DOCUMENT TYPE: Journal

LANGUAGE: English

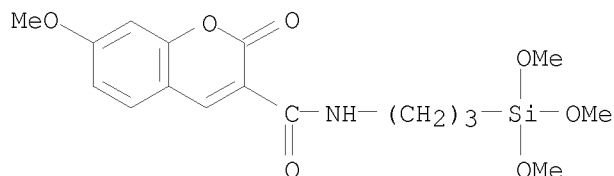
AB Coumarin mols. are widely used as laser dyes and their luminescence properties show a large potential for their use as light emitters in organic light emitting devices. These mols. however are lacking of photo, chemical and thermal stability. At the outset, the fact that when the coumarin or other organic active mols. are covalently bonded to a metal oxide host, the stability properties can be improved. The authors outline the synthesis of several different coumarin-3-carboxylic acids by using a 1-pot synthesis from dipotassium o-methoxybenzylidenemalonates. The authors also outline a preparative route for the synthesis of corresponding coumarin-3-carboxylic amides with a side chain containing terminal trimethoxysilane functionality, which allows the creation of a covalent bond between the mol. and a Si oxide host matrix. These silylated coumarins are then covalently bonded through a sol-gel method to a developing siloxane host matrix. The Si matrix materials were synthesized through hydrolysis and simultaneous condensation of metalalkoxides such as phenylmethyltrimethoxysilane. Coumarin dyes are bonded in-situ to the developing matrix during the preparation of the matrix. The excitation and emission spectra of these mols. are examined in liquid phase to evaluate the effect of varying substitution pattern on luminescence characteristics. The photo luminescence characteristics are also measured from a solid thin film to explore the effect of the matrix on emission wavelengths. These materials show potentiality for their applications in thin film electro luminescence devices whose fabrication and properties are finally discussed.

IT 297736-11-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(covalent bonding of coumarin mols. to sol-gel matrixes for organic light-emitting device applications)

RN 297736-11-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-[3-(trimethoxysilyl)propyl]- (CA INDEX NAME)



10/513699

OS.CITING REF COUNT:	8	THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT:	19	THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 66 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:398444 CAPLUS

DOCUMENT NUMBER: 133:163934

TITLE: Asymmetric catalysis, 131. Naproxen derivatives by enantioselective decarboxylation

AUTHOR(S): Brunner, Henri; Schmidt, Peter

CORPORATE SOURCE: Institut für Anorganische Chemie der Universität, Regensburg, 93040, Germany

SOURCE: European Journal of Organic Chemistry (2000), (11), 2119-2133

CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:163934

AB A new catalytic method to synthesize the important anti-inflammatory agent naproxen which has to be used as the (S) enantiomer, involves the enantioselective decarboxylation of

2-(6-methoxynaphth-2-yl)-2-cyanopropionic acid (I). I was stirred in THF at 15°C with catalytic amts. of chiral bases, which abstracted the carboxyl proton. After decarboxylation, reprotonation of the anion afforded enantiomerically enriched

(S)-2-(6-methoxynaphth-2-yl)propionitrile (II), which may be hydrolyzed to naproxen. A variety of bases were screened, and cinchona alkaloids were found to give the best enantioselectivities. Thus, with quinidine up to 34% ee was obtained for II. The enantiomeric excess could be increased by turning to amides of 9-amino-9-deoxyepicinchona alkaloids. The most successful 2-ethoxybenzamide of 9-amino-9-deoxyepicinchonine (III) gave up to 71.9% ee of II. Cyclic ethers like THF were suitable solvents, and at a temperature of 15°C, conversion was quant. within 24 h in most cases. For high enantioselectivities, 5-10 mol-% of chiral base was sufficient, and the catalyst could be fully recycled after decarboxylation. The model compound 2-cyano-2-phenylpropionic acid was decarboxylated with III to the (S) enantiomer of 2-phenylpropionitrile with 60% ee.

IT 287979-63-9P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(stereoselective decarboxylation of naproxen intermediates with epicinchonine catalysts)

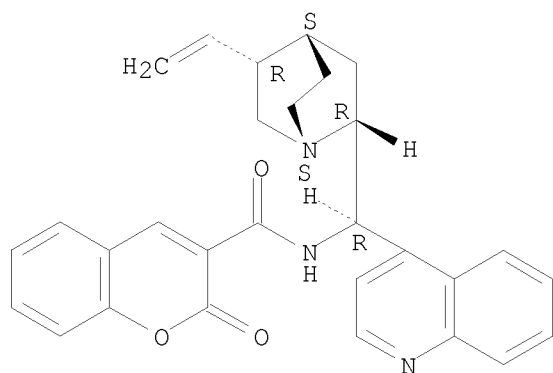
RN 287979-63-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[(9R)-cinchonan-9-yl]-2-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



10/513699



OS.CITING REF COUNT:	33	THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)
REFERENCE COUNT:	51	THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

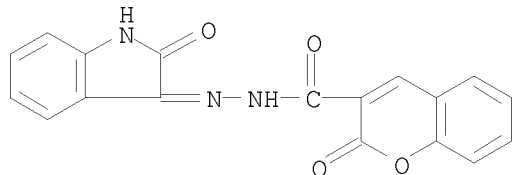
L9 ANSWER 67 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:370574 CAPLUS  
 DOCUMENT NUMBER: 133:177082  
 TITLE: Synthetic studies of some new derivatives bearing  
 isatin moiety  
 AUTHOR(S): Massoud, Mohamed A. M.  
 CORPORATE SOURCE: Department of Medicinal Chemistry, Faculty of  
 Pharmacy, University of Mansoura, Mansoura, 35516,  
 Egypt  
 SOURCE: Alexandria Journal of Pharmaceutical Sciences (   
 2000), 14(1), 51-57  
 CODEN: AJPSES; ISSN: 1110-1792  
 PUBLISHER: University of Alexandria, Faculty of Pharmacy  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 133:177082  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB 3-Substituted-2(1H)-indolinones I (R1 = H, Br; R2 = H, Ph, 4-H2NSO2C6H4, 4-pyridylcarbonyl, EtO2CCH2CO, EtO2C) were obtained by reaction of substituted 2H-furo[2,3-b]indol-2-ones II (R1 = H, Br) with primary amines, hydrazines, and acylhydrazines. Condensation of (oxocyclohexyl)indolone III or (hydroxyphenacyl)indolone IV (R1 = H, R3 = 2-HOC6H4) with malononitrile and Et cyanoacetate resulted in the formation of 4-cyano(or ethoxycarbonyl)chromenespiro[bromoindolones] V (R1 = Br; R4 = CN, EtO2C) and 3-cyano(or ethoxycarbonyl)-4-[hydroxy(indolinylmethyl)]coumarinimines VI (R1 = H; R4 = CN, EtO2C), resp. Dehydration of IV (R1 = Me, R3 = 4-H2NC6H4) into (phenacylidene)indolinone VII was carried out through reflux in glacial acetic acid. Some of the new compds. were evaluated for antimicrobial activity.

IT 288378-64-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (antimicrobial activity of isatin derivs. prepared directly from isatin or from furo[2,3-b]indolone precursors)

RN 288378-64-3 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
 2-(1,2-dihydro-2-oxo-3H-indol-3-ylidene)hydrazide (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

<12/04/2007>

Erich Leese

L9 ANSWER 68 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:367102 CAPLUS

DOCUMENT NUMBER: 133:14316

TITLE: Liquid barriers for assays

INVENTOR(S): Sasaki, Glenn; Coassin, Peter J.; Pham, Andrew A.;  
Harootunian, Alec; Mere, Lora; Cubitt, Andrew B.

PATENT ASSIGNEE(S): Aurora Biosciences Corporation, USA

SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1004870	A1	20000531	EP 1999-122323	19991109 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2289174	A1	20000509	CA 1999-2289174	19991109 <--
PRIORITY APPLN. INFO.:			US 1998-188866	A 19981109

AB The present invention provides liquid barriers that can reduce the evaporation of a liquid sample and is compatible with living cells. The liquid barriers of the present invention replace the need for mech. barriers, such as lids and covers, for use with assay containers, such as multi-well platforms. The use of such liquid barriers rather than mech. barriers reduces the need for robotics in automated screening procedures and thus allows for higher throughput in such procedures.

IT 183736-69-8, CCF 2AM  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (comparison of efficacy of mech. barriers and liquid barriers in mammalian cell culture assay using transcription read-out for screening chems. for biol. activity)

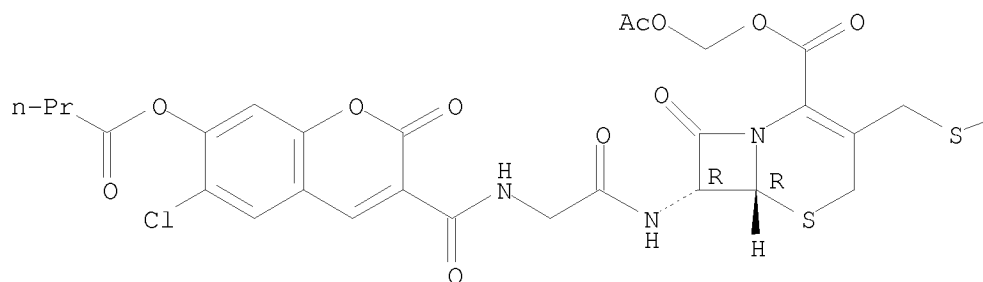
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-(CA INDEX NAME)

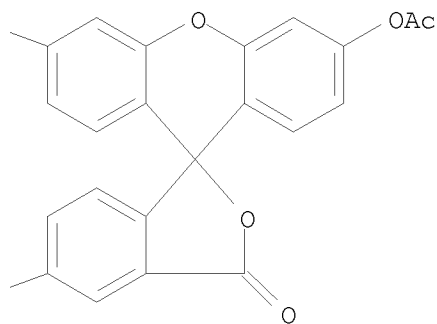
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 69 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:357640 CAPLUS

DOCUMENT NUMBER: 132:343292

TITLE: Retinoyl coumarin compounds, process for preparing and pharmaceutical compositions containing them

INVENTOR(S): Xu, Shiping; Han, Rui; Li, Lanmin; Cao, Xihua; Xu, Song; Xia, Lihjuan; Liu, Hongyan; You, Shengquan

PATENT ASSIGNEE(S): Institute of Materia Medica, Chinese Academy of Medical Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 32 pp.  
CODEN: CNXXEV

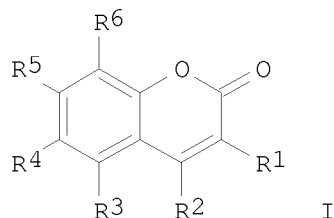
DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 1207392	A	19990210	CN 1997-116602	19970731 <--
CN 1108297	C	20030514		
PRIORITY APPLN. INFO.:			CN 1997-116602	19970731
OTHER SOURCE(S):	MARPAT	132:343292		
GI				



AB The retinoyl coumarins (I; R1 = H, C1-18 alkyl, arylalkyl, haloalkyl, or CX<sub>Y</sub>R<sub>7</sub>; R2 = H, C1-18 alkyl, haloalkyl, alkoxy, alkylcarbonyloxy, halo, OH, Ph, substituted Ph, CX<sub>Y</sub>R<sub>7</sub>, or OR; R3 = H, OH, halo, C1-18 alkyl, haloalkyl, alkylcarbonyloxy, alkoxy, OR, CH<sub>2</sub>OR, or CX<sub>Y</sub>R<sub>7</sub>; R4 = H, halo, C1-18 alkyl, haloalkyl, alkoxy, alkylcarbonyloxy, OH, or CX<sub>Y</sub>R<sub>7</sub>; R5, and/or R6 = H, C1-18 alkyl, haloalkyl, alkoxy, halo, alkylcarbonyloxy, OR, or CX<sub>Y</sub>R<sub>7</sub>; R7 = H, halo, OH, C1-18 alkyl, haloalkyl, alkoxy, alkylcarboxy, or substituted phenyl; the substituted on benzene ring = C1-4 alkyl, haloalkyl, alkoxy, OH, halo, COOH, alkylcarboxy, NO<sub>2</sub>, CF<sub>3</sub>, SO<sub>3</sub>H, or NR<sub>8</sub>R<sub>9</sub>; R8, and/or R9 = H, alkyl, cycloalkyl, or R8 + R9 = heterocycle; X, and/or Y = H, N, NH, C, CH, or O; and R = retinoyl) is synthesized by cyclizing 2-R<sub>6</sub>-3-R<sub>5</sub>-4-R<sub>4</sub>-5-R<sub>3</sub>-phenol with 3-R<sub>2</sub>-2-R<sub>1</sub>-acrylic acid or its derivative, and allowing to react with retinoic acid. The retinoyl coumarins are useful for treatment of cancer, precancerous lesion, and dermatosis, etc.

IT 186303-80-0P 186303-81-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

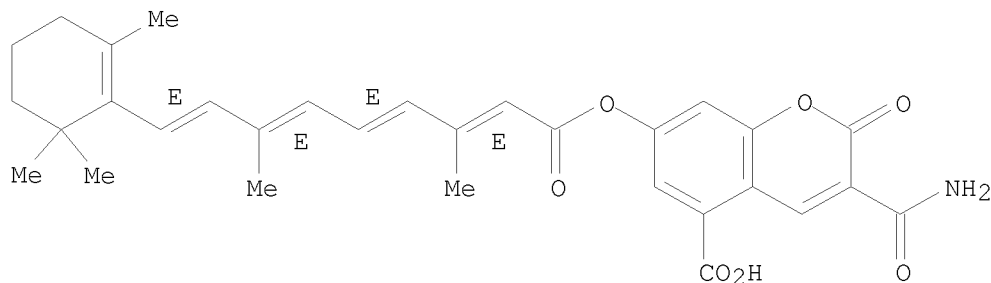
(retinoyl coumarin compds., process for preparing and pharmaceutical compns. containing them)

RN 186303-80-0 CAPLUS

10/513699

CN Retinoic acid, 3-(aminocarbonyl)-5-carboxy-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

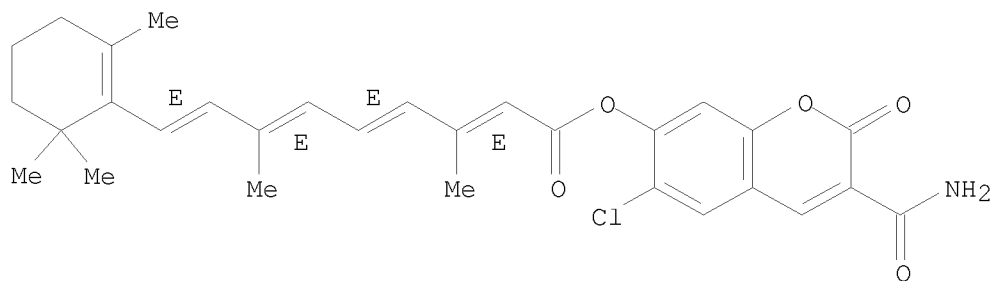
Double bond geometry as shown.



RN 186303-81-1 CAPLUS

CN Retinoic acid, 3-(aminocarbonyl)-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 70 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:316271 CAPLUS  
 DOCUMENT NUMBER: 133:150378  
 TITLE: Synthesis and Fluorescence Properties of New  
 Fluorescent, Polymerizable, Metal-Chelating Lipids  
 AUTHOR(S): Roy, Bidhan C.; Peterson, Rachel; Mallik, Sanku;  
 Campiglia, Andres D.  
 CORPORATE SOURCE: Department of Chemistry, North Dakota State  
 University, Fargo, ND, 58105, USA  
 SOURCE: Journal of Organic Chemistry (2000), 65(12),  
 3644-3651  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 133:150378

AB Liposomes incorporating fluorescent, metal-chelating lipids find applications in mol. recognition of peptides, 2D protein recrystn., protein targeting, and biol. sensing. It would be advantageous to combine the usefulness of polymerizable, metal-chelating lipids and fluorescent lipids. Herein, we report the synthesis and fluorescence properties of several fluorescent, polymerizable, metal-chelating lipids. They have been successfully incorporated into liposomes and then polymerized. These lipids can be used as membrane probes to study the polymerizable liposomes in the unpolymd. state and to investigate lipid redistribution during polymerization. In addition, if a luminescent metal ion (e.g., Eu<sup>3+</sup>, Tb<sup>3+</sup>, etc.) is

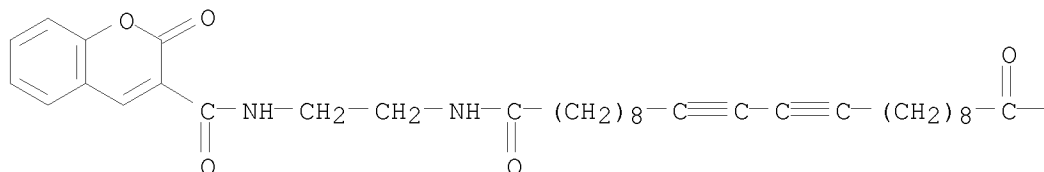
used to complex the headgroup, the lipids can probe the membrane interior and exterior simultaneously.

IT 287401-55-2P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and fluorescence properties of new fluorescent,  
 polymerizable, metal-chelating lipids)

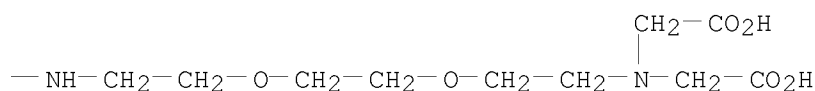
RN 287401-55-2 CAPLUS

CN 31,34-Dioxa-2,5,28,37-tetraazanonatriaconta-15,17-diyn-39-oic acid,  
 37-(carboxymethyl)-1,6,27-trioxo-1-(2-oxo-2H-1-benzopyran-3-yl)- (9CI)  
 (CA INDEX NAME)

PAGE 1-A



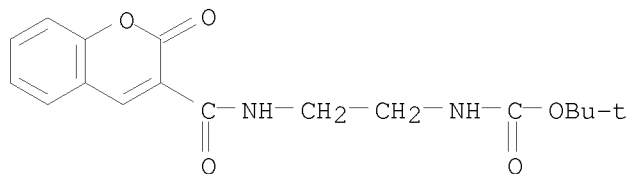
PAGE 1-B



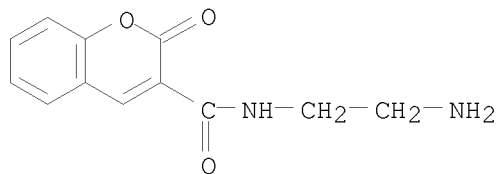


10/513699

IT 287401-64-3P 287401-65-4P 287401-80-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(synthesis and fluorescence properties of new fluorescent,  
polymerizable, metal-chelating lipids)  
RN 287401-64-3 CAPLUS  
CN Carbamic acid, [2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyl]-,  
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

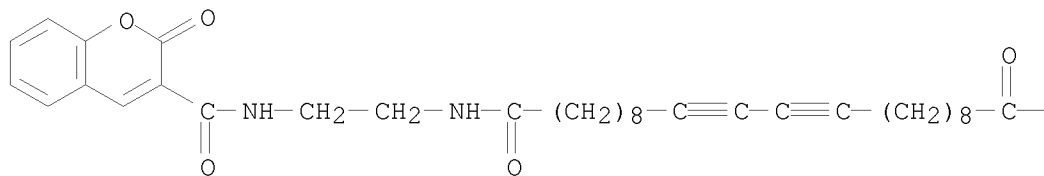


RN 287401-65-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminoethyl)-2-oxo- (CA INDEX NAME)

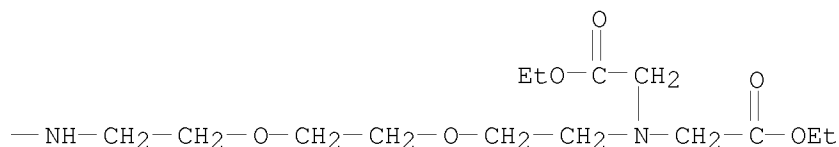


RN 287401-80-3 CAPLUS  
CN 31,34-Dioxa-2,5,28,37-tetraazanonatriaconta-15,17-diyn-39-oic acid,  
37-(2-ethoxy-2-oxoethyl)-1,6,27-trioxo-1-(2-oxo-2H-1-benzopyran-3-yl)-,  
ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



10/513699

OS.CITING REF COUNT:	14	THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
REFERENCE COUNT:	41	THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 71 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:314531 CAPLUS

DOCUMENT NUMBER: 132:334466

TITLE: Preparation of antimicrobial oxadiazole, thiadiazole and triazole derivatives and combinatorial libraries thereof

INVENTOR(S): Hebert, R. Normand; Hannah, Amy L.

PATENT ASSIGNEE(S): Trega Biosciences, Inc., USA

SOURCE: PCT Int. Appl., 254 pp.

CODEN: PIXXD2

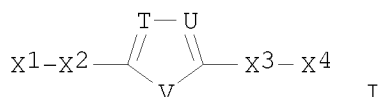
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025768	A1	20000511	WO 1999-US25331	19991028 <--
W: AU, CA, JP, KR, NO, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1126833	A2	20010829	EP 1999-971314	19991028 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1998-183222	A 19981029
			WO 1999-US25331	W 19991028
OTHER SOURCE(S):			MARPAT 132:334466	
GI				



AB The present invention relates to novel compds. of formula [I; T, U, V = O, S, or N, provided that at least two of T, U, and V are N; X1 = H, NHCONR1R2, CO2R1, OR1, NR1R2, CONR1R2, CH2NR1R2; wherein R1 = H, (un)substituted C1-6 alkyl, C2-7 alkenyl, Ph, or naphthyl, etc.; X2 = (un)substituted C1-12 alkylene, C2-7 alkenylene, C2-7 alkynylene, C3-7 cycloalkylene, or C5-7 cycloalkenylene, etc.; X3 = absent, (un)substituted CH2, (CH2)mO(CH2)nCO, Q, (CH2)mCHR6(CH2)n, etc.; wherein R6 = H, (un)substituted NH2, CO2H, or CONH2; m, n = 0,1-4; X4 = absent, H, OH, CO2H, (un)substituted CONH2 or NH2] or pharmaceutically acceptable salts, or biol. active esters thereof. The invention further relates to combinatorial libraries containing at least two or more such compds., and to methods of preparing combinatorial libraries composed of such compds. Libraries of oxadiazoles are prepared by (a) reacting one or more resin-bound amines with one or more nitrile-containing carboxylic acids, nitrile-containing isocyanates or nitrile-containing radicals with a leaving group to obtain two or more resin-bound nitriles; (b) cyclizing the resin-bound nitriles to obtain oxadiazoles containing an amino-protected group; and (c) deprotecting the amino-protected group to obtain oxadiazole a combinatorial library of two or more oxadiazole amine compds. They are

10/513699

also prepared by (a) reacting one or more resin-bound leaving groups with one or more nitrile-containing phenoxide ions or amines to obtain two or more resin-bound nitriles; (b) cyclizing the nitriles to obtain oxadiazoles containing a leaving group; and (c) reacting the leaving group with a primary amine or secondary amine to obtain a combinatorial library of two or more oxadiazole secondary amines or oxadiazole tertiary amines. These compds. are useful as antimicrobial agents, e.g. antifungal and antibacterial agents.

IT 267010-73-1P

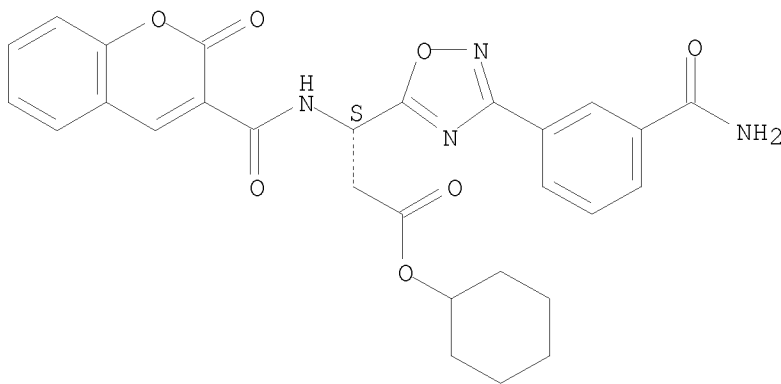
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antimicrobial oxadiazole, thiadiazole, and triazole derivs., e.g. by conversion of resin-bound nitriles to amidoximes with hydroxylamine and cyclization of amidoximes to oxadiazoles)

RN 267010-73-1 CAPLUS

CN 1,2,4-Oxadiazole-5-propanoic acid,  
3-[3-(aminocarbonyl)phenyl]- $\beta$ -[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, cyclohexyl ester, ( $\beta$ S)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 72 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:269984 CAPLUS

DOCUMENT NUMBER: 133:105249

TITLE: Coumarin-fluorescein pair as a new donor-acceptor set for fluorescence energy transfer study of DNA

AUTHOR(S): Mitsui, Tsuneo; Nakano, Hidehiko; Yamana, Kazushige

CORPORATE SOURCE: Department of Applied Chemistry, Himeji Institute of Technology, Himeji, 671-2201, Japan

SOURCE: Tetrahedron Letters (2000), 41(15), 2605-2608

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A method for introduction of the 2'-coumarin labeled nucleoside as a fluorescence energy donor into DNA duplexes has been described. Efficient FRET occurs between the coumarin-fluorescein pair in DNA owing to the high quantum yield of the donor. The present donor-acceptor pair may be useful as FRET indicator of DNA structures in solution

IT 282543-34-4P 282543-35-5P 282543-36-6P  
282543-37-7P

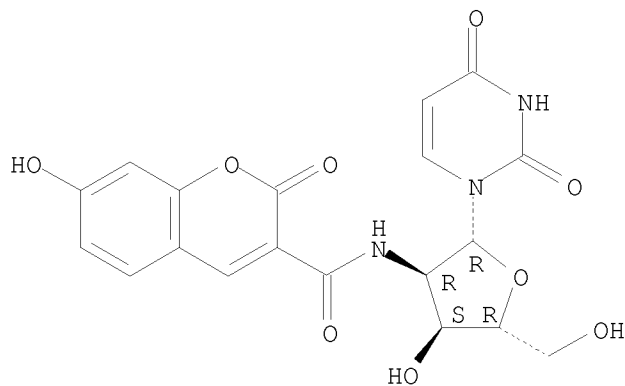
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(coumarin-fluorescein pair as a new donor-acceptor set for fluorescence energy transfer study of DNA)

RN 282543-34-4 CAPLUS

CN Uridine, 2'-deoxy-2'-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

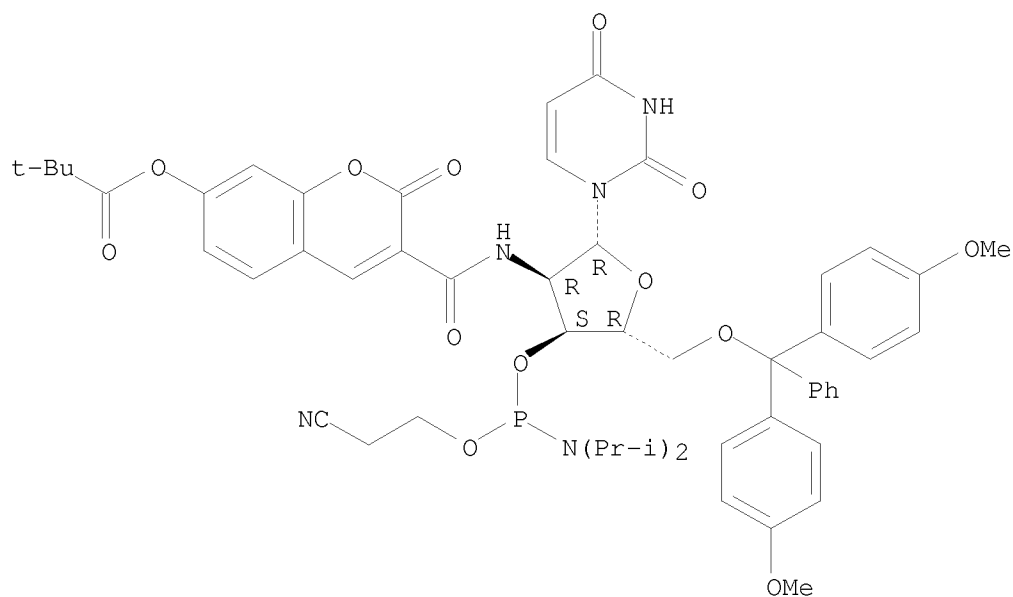


RN 282543-35-5 CAPLUS

CN Uridine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-2'-[[[7-(2,2-dimethyl-1-oxopropoxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, 3'-[2-cyanoethyl bis(1-methylethyl)phosphoramidite] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

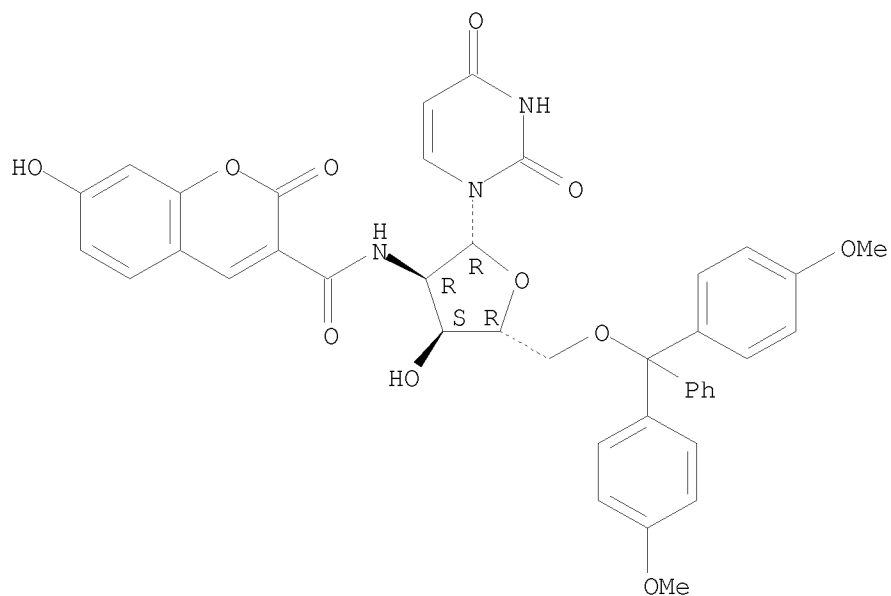
10/513699



RN 282543-36-6 CAPLUS

CN Uridine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-2'-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282543-37-7 CAPLUS

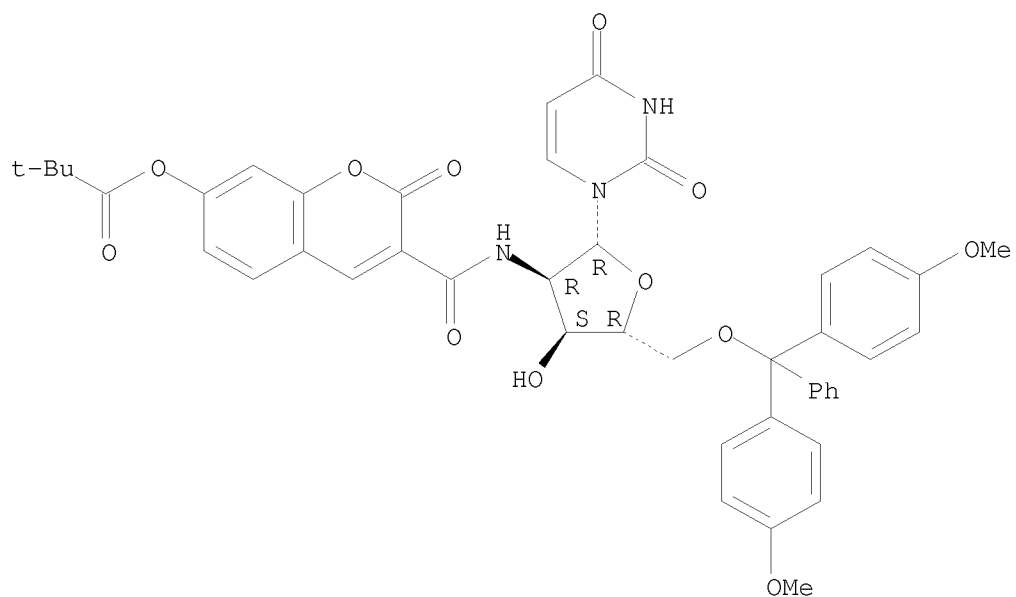
CN Uridine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-2'-[[[7-(2,2-dimethyl-1-oxopropoxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (9CI) (CA INDEX NAME)

<12/04/2007>

Erich Leese

10/513699

Absolute stereochemistry.



OS.CITING REF COUNT:	20	THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)
REFERENCE COUNT:	13	THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 73 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:269241 CAPLUS

DOCUMENT NUMBER: 133:73957

TITLE: Synthetic reactions of  
coumarin-3-(4-aminosulfonyl)carbanilide derivatives  
with reactive methylene compounds

AUTHOR(S): El-Saghier, Ahmed M. M.; Al-Afaleq, El-Jazii

CORPORATE SOURCE: Chemistry Department, Faculty of Science, Sohag, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related  
Elements (1998), 139, 67-75

CODEN: PSSLEC; ISSN: 1042-6507

PUBLISHER: Gordon &amp; Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:73957

AB Coumarin- and benzo[f]coumarin-3-(4-aminosulfonyl)carbanilide derivs. (I) react with malononitrile or Et cyanoacetate to afford pyrido[3,4-c]-benzo-[f]coumarin derivs. These compds. were also prepared by treatment of arylidenemalononitrile or arylidene cyano ester derivs. with EtO<sub>2</sub>CCH<sub>2</sub>CONHC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NH<sub>2</sub>-4. I were also allowed to react with a variety of active methylenes having an  $\alpha$ -cyano or  $\alpha$ -keto group to give pyrido[3,4-c]- and pyrido[3,4-c]-benzo[f]coumarin derivs. through a nucleophilic addition and cyclization.

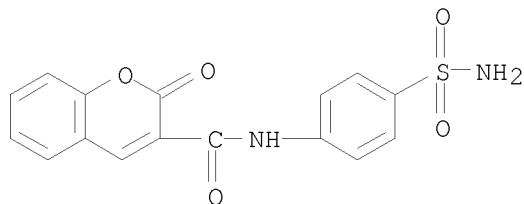
IT 111456-11-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactions of coumarin-3-(4-aminosulfonyl)carbanilide derivs. with reactive methylene compds.)

RN 111456-11-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(aminosulfonyl)phenyl]-2-oxo- (CA INDEX NAME)



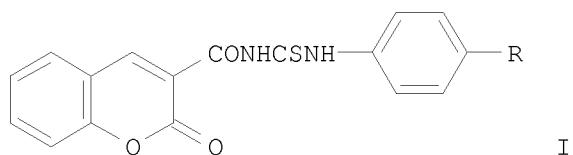
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



10/513699

L9 ANSWER 74 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:268753 CAPLUS  
DOCUMENT NUMBER: 133:30642  
TITLE: Synthesis of some new  
N-(3-coumarincarbonyl)-N'-arylthiourea derivatives  
AUTHOR(S): Nicolae, Anca; Li, Zhonghua; Gavrilu, Daniela; Maior,  
Ovidiu  
CORPORATE SOURCE: Facultatea de Chimie, Universitatea Bucuresti,  
Bucharest, Rom.  
SOURCE: Revista de Chimie (Bucharest) (1999),  
50(11), 817-821  
CODEN: RCBUAU; ISSN: 0034-7752  
PUBLISHER: SYSCOM 18 SRL  
DOCUMENT TYPE: Journal  
LANGUAGE: Romanian  
GI



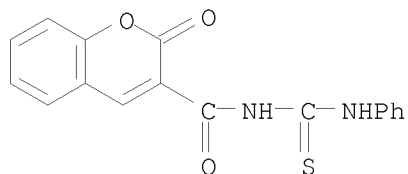
AB Through the reaction of 3-coumarincarbonyl chloride with KSCN in acetone and the addition of some primary arylamines to 3-coumarincarbonyl isothiocyanate, we obtained new N-(3-coumarincarbonyl)-N'-arylthioureas, e.g., I (R = H, halo). The new compds. were characterized by IR and <sup>1</sup>H- and <sup>13</sup>C-NMR.

IT 273933-18-9P 273933-19-0P 273933-20-3P  
273933-21-4P 273933-22-5P 273933-23-6P  
273933-24-7P 273933-25-8P 273933-26-9P  
273933-28-1P 273933-29-2P 273933-30-5P  
273933-31-6P 273933-32-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 273933-18-9 CAPLUS

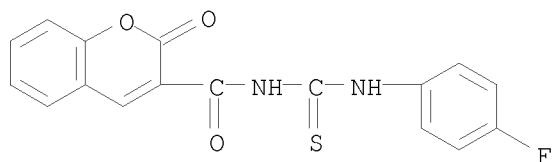
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[(phenylamino)thioxomethyl]- (CA INDEX NAME)



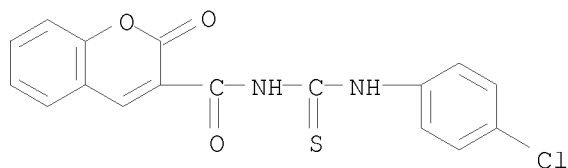
RN 273933-19-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[[ (4-fluorophenyl) amino]thioxomethyl]-2-oxo- (CA INDEX NAME)

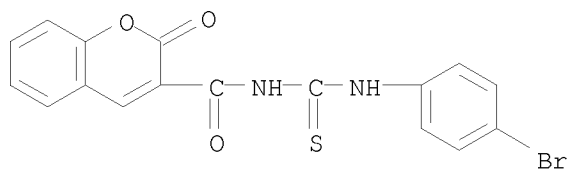
10/513699



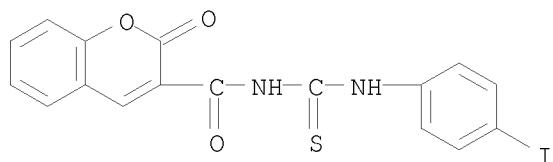
RN 273933-20-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(4-chlorophenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)



RN 273933-21-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(4-bromophenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)

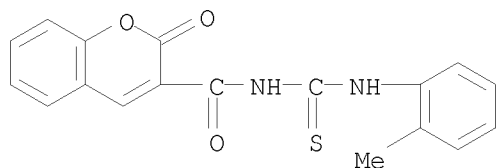


RN 273933-22-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(4-iodophenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)

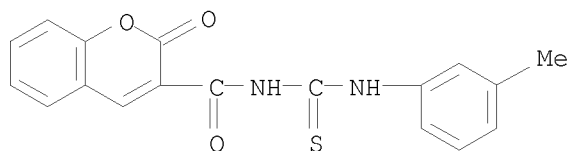


RN 273933-23-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(2-methylphenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)

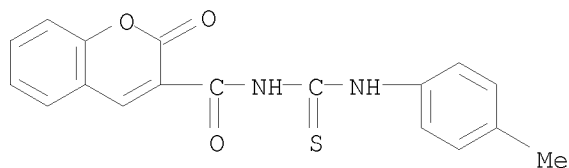
10/513699



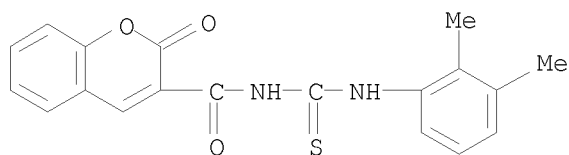
RN 273933-24-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(3-methylphenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)



RN 273933-25-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(4-methylphenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)

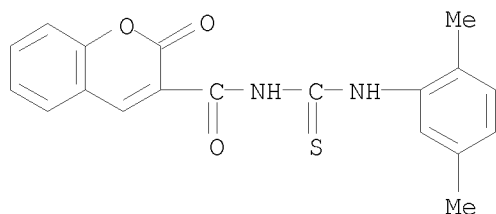


RN 273933-26-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(2,3-dimethylphenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)



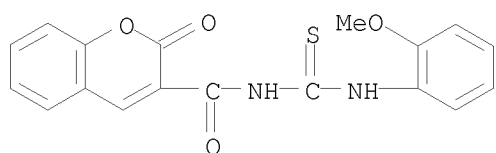
RN 273933-28-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(2,5-dimethylphenyl)amino]thioxomethyl]-2-oxo- (CA INDEX NAME)

10/513699



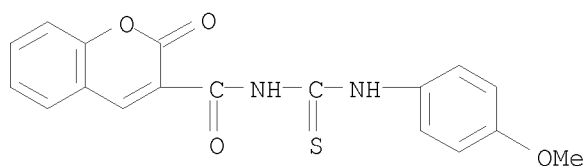
RN 273933-29-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[[2-methoxyphenyl]amino]thioxomethyl]-2-oxo- (CA INDEX NAME)



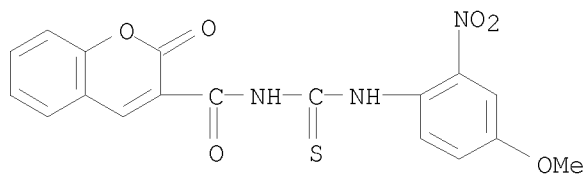
RN 273933-30-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[[4-methoxyphenyl]amino]thioxomethyl]-2-oxo- (CA INDEX NAME)



RN 273933-31-6 CAPLUS

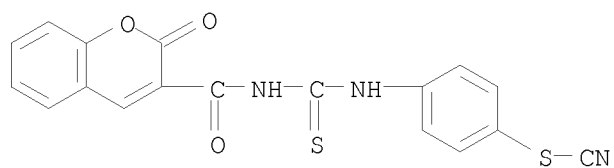
CN 2H-1-Benzopyran-3-carboxamide, N-[[4-methoxy-2-nitrophenyl]amino]thioxomethyl]-2-oxo- (CA INDEX NAME)



RN 273933-32-7 CAPLUS

CN Thiocyanic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]thioxomethyl]amino]phenyl ester (CA INDEX NAME)

10/513699

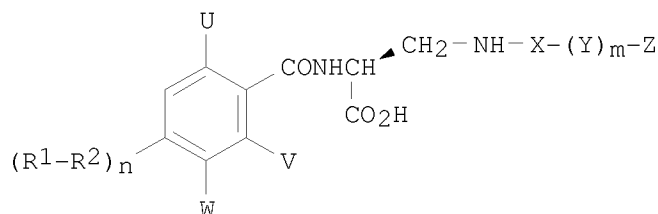


<12/04/2007>

Erich Leese

L9 ANSWER 75 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:260225 CAPLUS  
 DOCUMENT NUMBER: 132:294010  
 TITLE: Preparation of diaminopropionic acid derivatives as  
 intracellular adhesion molecule-1 (ICAM-1) binding  
 inhibitors  
 INVENTOR(S): Fotouhi, Nader; Gillespie, Paul; Guthrie, Robert  
 William; Pietranico-Cole, Sherrie Lynn; Yun, Weiya  
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.  
 SOURCE: PCT Int. Appl., 259 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021920	A1	20000420	WO 1999-EP7620	19991012 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6331640	B1	20011218	US 1999-407534	19990929 <--
CA 2344058	A1	20000420	CA 1999-2344058	19991012 <--
CA 2344058	C	20090526		
BR 9914602	A	20010703	BR 1999-14602	19991012 <--
EP 1121342	A1	20010808	EP 1999-953772	19991012 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200101038	T2	20010921	TR 2001-1038	19991012 <--
JP 2002527416	T	20020827	JP 2000-575829	19991012 <--
JP 3720709	B2	20051130		
AU 766468	B2	20031016	AU 2000-10349	19991012
CN 1274670	C	20060913	CN 1999-812099	19991012
MX 2001003284	A	20011011	MX 2001-3284	20010329 <--
ZA 2001002608	A	20020930	ZA 2001-2608	20010329 <--
US 20020052512	A1	20020502	US 2001-879700	20010612 <--
US 20040006236	A1	20040108	US 2003-349289	20030122
US 6803384	B2	20041012		
US 20050080119	A1	20050414	US 2004-945650	20040921
US 7217728	B2	20070515		
US 20070155671	A1	20070705	US 2007-703925	20070208
US 7491741	B2	20090217		
PRIORITY APPLN. INFO.:			US 1998-104120P	P 19981013
			US 1999-407534	A3 19990929
			WO 1999-EP7620	W 19991012
			US 2001-879700	B3 20010612
			US 2003-349289	A3 20030122
			US 2004-945650	A3 20040921
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): MARPAT 132:294010				
GI				



AB Diaminopropionic acid derivs. I [R1 = substituted 1-naphthyl, 4-indolyl, 4-benzimidazolyl, 4-benzodiazolyl, 4-benzotriazolyl, or phenyl; R2 = CHR3NHCO (R3 = H, carboxy, alkyl), CH2CH2CO, 1,2-cyclopropanediylcarbonyl, OCH2CO, CH:CHCHR3, CH2CH2CH(OH), CONHCHR3, or CH2NH-5,1-tetrazolediyl; U, V, W = H, halo, alkyl provided that U and V are not both hydrogen; X = CO, phenylalkylene, sulfonyl; Y = alkylene which may be substituted by amino or cycloalkyl, alkenylene, alkyleneithio; Z = H, alkylthio, CO2H, CONH2, 1-adamantyl, diphenylmethyl, 3-[[[(5-chloro-2-pyridinyl)amino]carbonyl]-2-pyrazinyl, hydroxy, phenylmethoxy, 2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]phenyl, [(2,6-dichlorophenyl)methoxy], Ph, (un)substituted cycloalkyl or aryl or fused ring system which may contain 0-3 heteroatoms; m, n = 0, 1] or their pharmaceutically acceptable salts or esters were prepared and are useful for treating rheumatoid arthritis, psoriasis, multiple sclerosis, Crohn's disease, ulcerative colitis, atherosclerosis, restenosis, pancreatitis, transplant rejection, delayed graft function and diseases of ischemia reperfusion injury, including acute myocardial infarction and stroke. Thus, N-[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]-3-(3-methoxybenzoylamino)-L-alanine was prepared by the solid-phase method and showed IC50 = 1.2 nM in the LFA-1 (lymphocyte function-associated antigen-1)/ICAM-1 protein-protein assay.

IT 264274-26-2P

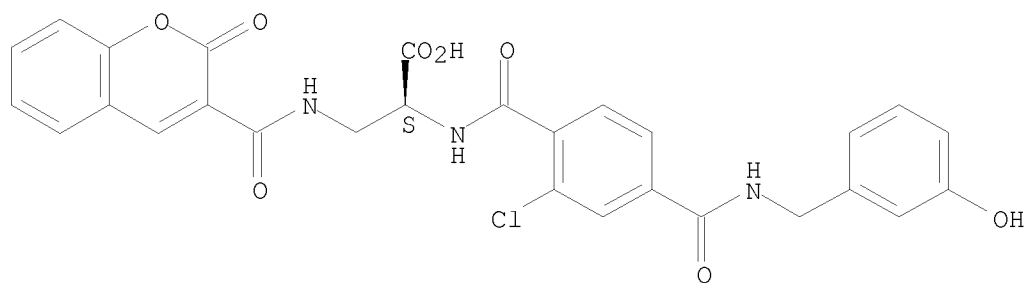
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of diaminopropionic acid derivs. as intracellular adhesion mol.-1 (ICAM-1) binding inhibitors)

RN 264274-26-2 CAPLUS

CN L-Alanine, N-[2-chloro-4-[[[(3-hydroxyphenyl)methyl]amino]carbonyl]benzoyl]-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

10/513699



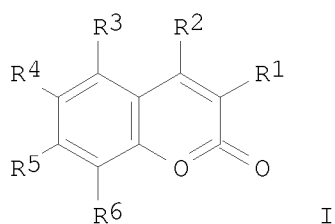
OS.CITING REF COUNT:	18	THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (28 CITINGS)
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



10/513699

L9 ANSWER 76 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:201141 CAPLUS  
DOCUMENT NUMBER: 132:217127  
TITLE: Retinoids and its application  
INVENTOR(S): Han, Rui; Xu, Shiping; Yuan, Zhanliang  
PATENT ASSIGNEE(S): Institute of Materia Medica, Peop. Rep. China  
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 36 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 1187193	A	19980708	CN 1996-194472	19960607 <--
PRIORITY APPLN. INFO.:			CN 1996-194472	19960607
OTHER SOURCE(S):	MARPAT	132:217127		
GI				



AB The retinoid derivs. (I, 3-R1-4-R2-5-R3-6-R4-7-R5-8-R6-coumarin, R1 = H, C1-18 alkyl, COR7, or NHR8; R2 = H, OH, C1-18 alkyl, or OR; R3 = H, CH3, or COR7; R4 = H, halo, OH, C1-18 alkyl, COR7, or OR; R5 = H, or OR; R6 = H, CH3, COR7 or OR; R7 = H, OH, C1-18 alkoxy, or NHR8; R8 = H, C1-18 alkyl, Ph, or (OH, COOH, OCH3, or NO2 substituted)phenyl; R = retinoyl; and one of R1-R6 = retinoyl, retinoic acid R' ester (R = purine derivative)) are prepared by chlorinating retinoic acid with PCl in benzene under bubbling N, concentrating in vacuum, dissolving Et ether to obtain retinoyl chloride/ethyl ether solution, acylating coumarin derivative or purine derivative with the above solution in the presence of acid capturer for 2 h, filtering, drying, and recrystg. with ethanol. The medicinal composition is composed of I or retinoyl and medicinal carrier. The medicinal composition is used as an immunoregulator and for suppression of cell or tissue cancer or pro-cancer.

IT 186303-80-0P 186303-81-1P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of retinoids as antitumor drugs and immunoregulators)

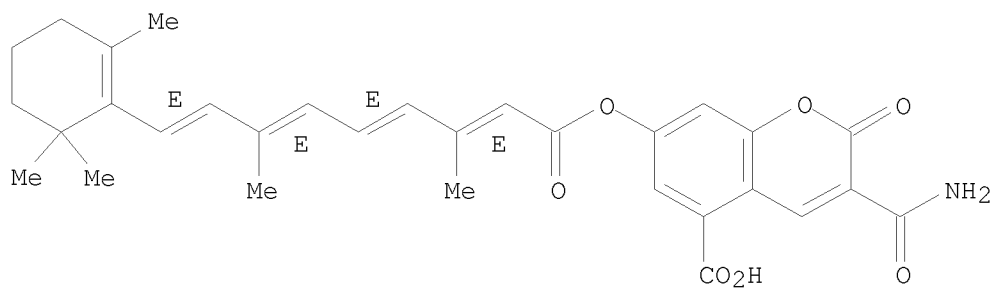
RN 186303-80-0 CAPLUS  
CN Retinoic acid, 3-(aminocarbonyl)-5-carboxy-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

<12/04/2007>

Erich Leese

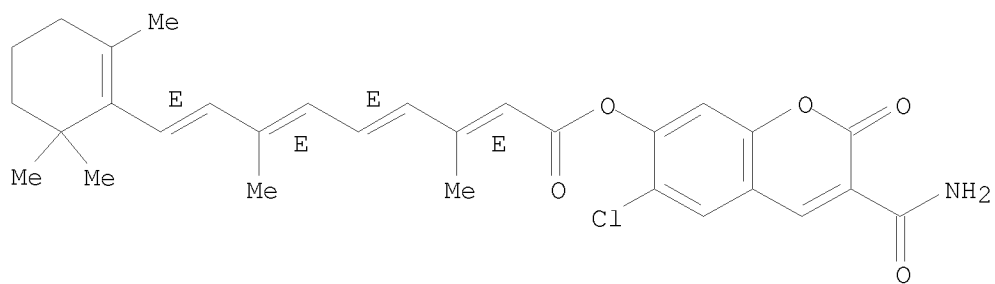
10/513699



RN 186303-81-1 CAPLUS

CN Retinoic acid, 3-(aminocarbonyl)-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



<12/04/2007>

Erich Leese

10/513699

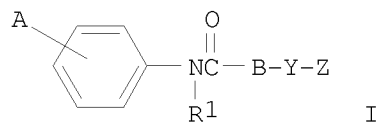
L9 ANSWER 77 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:98525 CAPLUS  
DOCUMENT NUMBER: 132:137396  
TITLE: Phenylazole compounds, process for producing the same  
and drugs for hyperlipemia  
INVENTOR(S): Umeda, Nobuhiro; Mochizuki, Nobuo; Uchida, Seiichi;  
Nishibe, Tadayuki; Yamada, Hirokazu; Ito, Kunihiro;  
Horikoshi, Hiromi  
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 92 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2000006550	A1	20000210	WO 1999-JP4070	19990729 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2339123	A1	20000210	CA 1999-2339123	19990729 <--
AU 9949297	A	20000221	AU 1999-49297	19990729 <--
AU 753360	B2	20021017		
EP 1101759	A1	20010523	EP 1999-933152	19990729 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1131217	C	20031217	CN 1999-809019	19990729
JP 2000290280	A	20001017	JP 1999-216581	19990730 <--
JP 2000281656	A	20001010	JP 1999-221789	19990804 <--
JP 2000281658	A	20001010	JP 1999-221790	19990804 <--
US 6342516	B1	20020129	US 2001-744786	20010126 <--
PRIORITY APPLN. INFO.:			JP 1998-218316	A 19980731
			JP 1998-222157	A 19980805
			JP 1999-16846	A 19990126
			JP 1999-19670	A 19990128
			JP 1999-24318	A 19990201
			WO 1999-JP4070	W 19990729

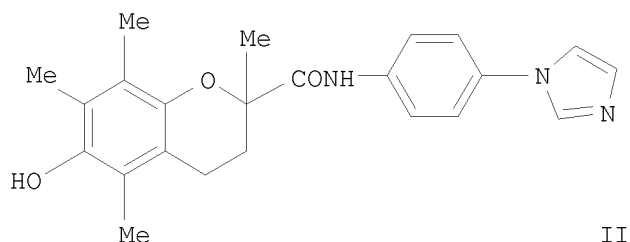
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 132:137396

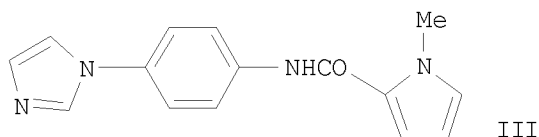
GI



I



II



III

AB Phenylpyrazole and phenylimidazole compds. represented by general formula (I; wherein A represents (un)substituted imidazolyl or pyrazolyl; B represents (un)substituted (CH<sub>2</sub>)<sub>k</sub> or (CH:CH)<sub>k</sub>; Y = bond, O, S, SO<sub>2</sub>, CO, OCH<sub>2</sub>, C1-5 alkyl-(un)substituted NHCO or NH; Z = (un)substituted and saturated or unsatd. heterocycle containing 1 to 4 N, O or S atoms, (un)substituted benzoquinonyl or naphthoquinonyl) or pharmaceutically acceptable salts thereof are prepared Claimed are drugs for hyperlipemia which contain these compds. I as the active ingredient. Among all, compds. wherein Z is substituted chroman-2-yl, 2,3-dihydrobenzofuran-2-yl, etc. have an effect of inhibiting the formation of lipid peroxides too. Thus, 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid, 1-(4-aminophenyl)imidazole 4.0, 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride 2.82, 1-hydroxybenzotriazole 2.72 g, and 2.5 mL Et<sub>3</sub>N were added to 30 mL DMF and stirred at room temperature for 20 h to give title compound (II). II and N-[4-(imidazol-1-yl)phenyl]-1-methyl-3-pyrrololecarboxamide (III) at 25 mg/kg p.o. lowered total serum level of cholesterol 40 and 75%, resp., and serum triglyceride level by 62 and 91%, resp. A tablet formulation containing I was prepared

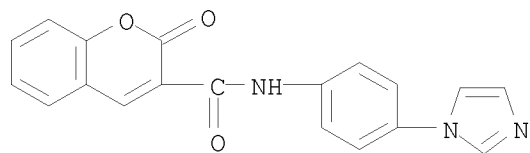
IT 256661-70-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of phenylazole compds. as hypolipidemics and inhibitors of lipid peroxide formation)

RN 256661-70-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(1H-imidazol-1-yl)phenyl]-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:	11	THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
REFERENCE COUNT:	8	THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 78 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:95892 CAPLUS

DOCUMENT NUMBER: 132:137278

TITLE: Preparation of dibenzothiophenedicarboxylates and analogs as angiogenesis inhibitors

INVENTOR(S): Salvati, Mark E.; Eudy, Nancy H.; Hallett, William A.; Powell, Dennis William

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: U.S., 85 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6022307	A	20000208	US 1999-340353	19990628 <--
PRIORITY APPLN. INFO.:			US 1998-112024	P 19980714

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

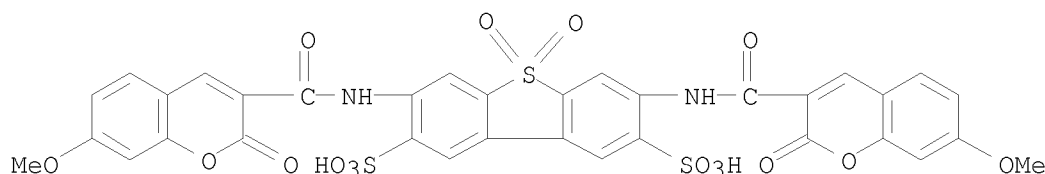
OTHER SOURCE(S): MARPAT 132:137278

AB RZNHCOR1 [R = Cl or R1CONH and Z = e.g., 2,8-dicarboxydibenzothiophene-3,7-diyl; R = R1CONH and Z = e.g., 2,8-disulfo-5,5-dioxodibenzothiophene-3,7-diyl; R1 = (hetero)aryl(vinyl), etc.] were prepared Thus, dibenzothiophene was converted in a multistep synthesis to Z(NHCOR1)2 [R1 = 2-benzo[b]thienyl, Z = 2,8-bis(sodiocarboxy)dibenzothiophene-3,7-diyl]. Data for biol. activity of title compds. were given.

IT 256936-74-0P 256937-30-1P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of dibenzothiophenedicarboxylates and analogs as angiogenesis inhibitors)

RN 256936-74-0 CAPLUS

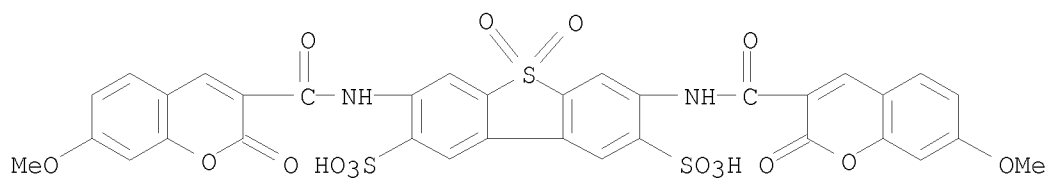
CN 2,8-Dibenzothiophenedisulfonic acid,  
3,7-bis[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
5,5-dioxide, sodium salt (1:2) (CA INDEX NAME)



RN 256937-30-1 CAPLUS

CN 2,8-Dibenzothiophenedisulfonic acid,  
3,7-bis[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
5,5-dioxide (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)  
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 79 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:809990 CAPLUS

DOCUMENT NUMBER: 132:166094

TITLE: Synthesis and anti-inflammatory activity of  
N-substituted 2-oxo-2H-1-benzopyran-3-carboxamides and  
their 2-imino analogsAUTHOR(S): Bylov, Igor E.; Vasylyev, Maksym V.; Bilokin, Yaroslav  
V.CORPORATE SOURCE: Department of Organic Chemistry, Ukrainian Academy of  
Pharmacy, Kharkov, 310002, UkraineSOURCE: European Journal of Medicinal Chemistry (1999  
, 34(11), 997-1001  
CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The N-aryl-substituted 2-imino-2H-1-benzopyran-3-carboxamides and  
2-oxo-2H-1-benzopyran-3-carboxamides were synthesized and evaluated for  
their antiinflammatory activity in carrageenan-induced rat paw edema  
assays and in HOAc-induced peritonitis tests in albino rats. The  
resulting products are active antiinflammatory agents and their effects  
were comparable to that of piroxicam as the reference compound. In the  
consideration of the efficacy of the compds. in these assays,  
2-imino/oxo-2H-1-benzopyran-3-carboxamides were further studied at graded  
doses for their acute toxicity (ALD50) in albino mice and were essentially  
nontoxic at the highest dose tested.

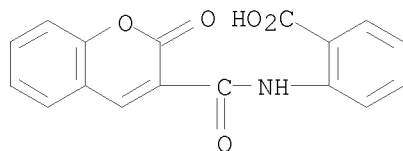
IT 73877-78-8P 111947-24-1P 150711-89-0P  
258844-09-6P 258844-10-9P 258844-11-0P  
258844-12-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
study); PREP (Preparation)

(synthesis and anti-inflammatory activity of N-substituted  
2-oxo-2H-1-benzopyran-3-carboxamides and 2-imino analogs)

RN 73877-78-8 CAPLUS

CN Benzoic acid, 2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX  
NAME)

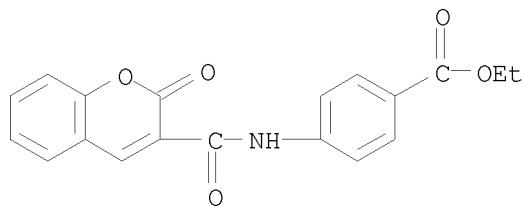


RN 111947-24-1 CAPLUS

CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl  
ester (CA INDEX NAME)

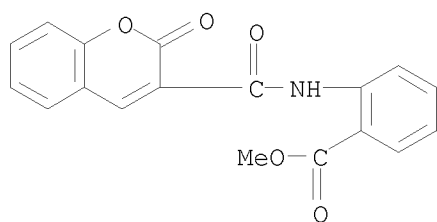


10/513699



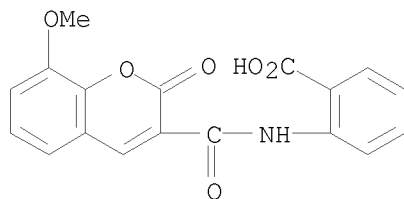
RN 150711-89-0 CAPLUS

CN Benzoic acid, 2-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, methyl ester (CA INDEX NAME)



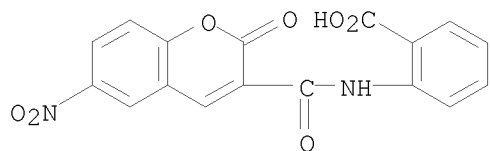
RN 258844-09-6 CAPLUS

CN Benzoic acid, 2-[[8-methoxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)



RN 258844-10-9 CAPLUS

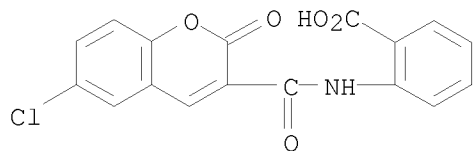
CN Benzoic acid, 2-[[6-nitro-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)



RN 258844-11-0 CAPLUS

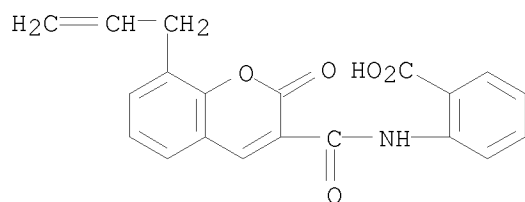
CN Benzoic acid, 2-[[6-chloro-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)

10/513699



RN 258844-12-1 CAPLUS

CN Benzoic acid, 2-[[[2-oxo-8-(2-propen-1-yl)-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS  
RECORD (16 CITINGS)  
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 80 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1999:790749 CAPLUS  
DOCUMENT NUMBER: 132:166083  
TITLE: Synthesis and evaluation of certain benzo[b]thiophene  
derivatives as potential cytotoxic and antiviral  
agents  
AUTHOR(S): Massoud, Mohamed A. M.  
CORPORATE SOURCE: Department of Medicinal Chemistry, University of  
Mansoura, Mansoura, 35516, Egypt  
SOURCE: Mansoura Journal of Pharmaceutical Sciences ( 1999), 15(1), 99-109  
CODEN: MJPSEO; ISSN: 1110-1318  
PUBLISHER: Mansoura University, Faculty of Pharmacy  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

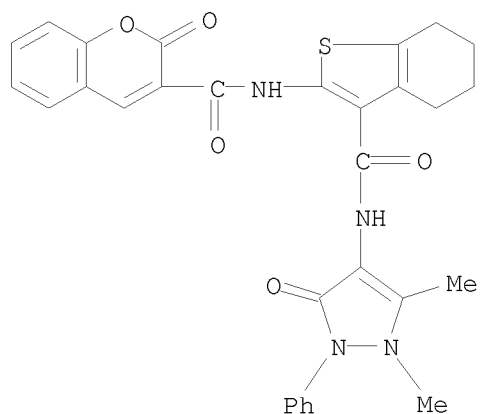
AB A series of  $\alpha$ -cyano- $\alpha,\beta$ -unsatd. substituted secondary amides has been synthesized by condensation of a cyanoacetamide derivative with acetylacetone, 5,5-dimethyl-1,3-cyclohexanedione, and cyclohexanone. The nonreactivity of the acetylacetone reaction product toward cyclization reactions is discussed. Benzo[b]thiophenes I (X = O, R = Me; X = H<sub>2</sub>, R = H) are obtained by reaction of two of the above amides with sulfur in the presence of morpholine. Reactions of I (X = H<sub>2</sub>, R = H) with 2H-furo[2,3-b]indol-2-one, Et malonyl chloride with subsequent condensation with salicylaldehyde, and isocyanates gave diamides and ureido amides. Further reactions led to uracil and 2-isatinylideneamino derivs., II and III, resp. Some of the prepared compds. were screened for DNA binding, cytotoxicity and antiviral activity.

IT 258843-92-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(benzo[b]thiophene derivs. as potential cytotoxic and antiviral agents)

RN 258843-92-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[[ (2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)amino]carbonyl]-4,5,6,7-tetrahydrobenzo[b]thien-2-yl]-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	32	THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 81 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1999:750286 CAPLUS  
 DOCUMENT NUMBER: 132:137250  
 TITLE: Preparation and antibacterial activity of sulfonamido  
 derivatives and amides of coumarin compounds  
 AUTHOR(S): Shah, Sonal; Desai, Devki; Mehta, R. H.  
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science, M. S.  
 University of Baroda, Vadodara, 390 002, India  
 SOURCE: Journal of the Indian Chemical Society (1999  
 ), 76(10), 507-508  
 CODEN: JICSAH; ISSN: 0019-4522  
 PUBLISHER: Indian Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

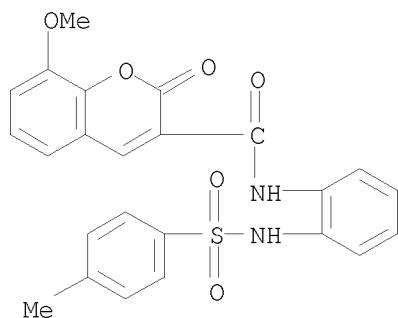
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Coumarin sulfonamide derivs. I and II (R = Me, MeO, AcNH, Cl, Br; R1 = H, Br) were prepared by sulfonylation of an aminophenylaminocarbonyl coumarin, and by nucleophilic displacement of a chloromethyl coumarin with o-phenylenedimaine followed by sulfonylation. Coumarin derivs. III (R2 = Me, Me2CH, MeSCH2CH2, HOCH2; X = bond) and their racemic derivs (R2 = H, Me, Me2CH, MeSCH2CH2, PhCH2; X = bond, CH2) were also prepared from a coumarin acid chloride and racemic and L-amino acid derivs. I, II, and III were tested for their antibiotic activity against E. coli, S. aureus, S. typhosa, and S. albus; I and II showed moderate to low activity against the tested bacteria, while the coumarins III showed no activity against any of the bacteria.

IT 256658-51-2P 256658-52-3P 256658-53-4P  
 256658-54-5P 256658-55-6P 256658-66-9P  
 256658-67-0P 256658-68-1P 256658-69-2P  
 256658-70-5P 256658-71-6P 256658-72-7P  
 256658-73-8P 256658-74-9P 256658-75-0P  
 256658-76-1P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and antibacterial activity of coumarin sulfonamide and amino acid derivs.)

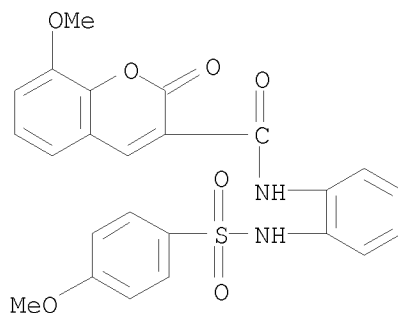
RN 256658-51-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[[[4-methylphenyl)sulfonyl]amino]phenyl]-2-oxo- (CA INDEX NAME)

10/513699



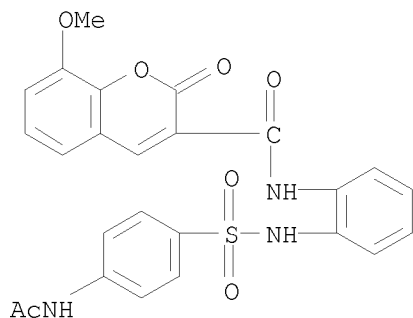
RN 256658-52-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[[4-methoxyphenyl)sulfonyl]amino]phenyl]-2-oxo- (CA INDEX NAME)



RN 256658-53-4 CAPLUS

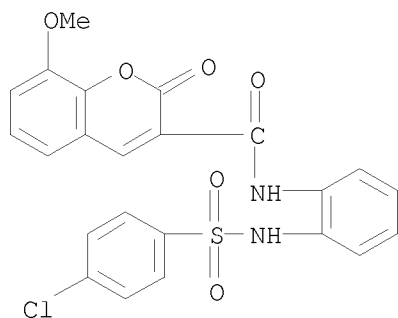
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[[4-(acetylamino)phenyl)sulfonyl]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



RN 256658-54-5 CAPLUS

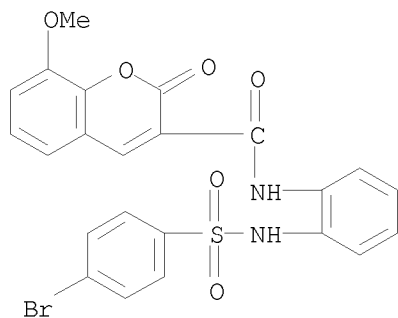
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[[4-(4-chlorophenyl)sulfonyl]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)

10/513699



RN 256658-55-6 CAPLUS

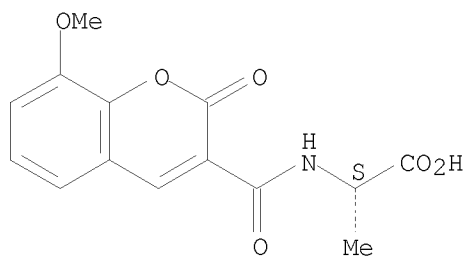
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[4-bromophenyl)sulfonyl]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



RN 256658-66-9 CAPLUS

CN L-Alanine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

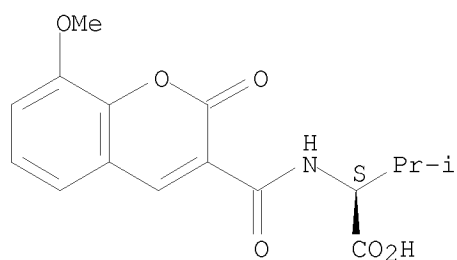


RN 256658-67-0 CAPLUS

CN L-Valine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

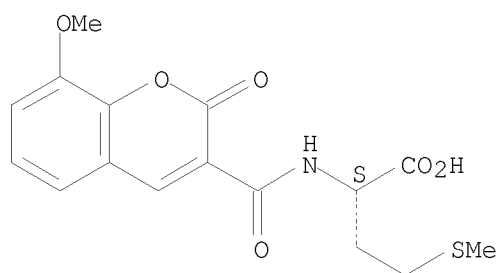
Absolute stereochemistry. Rotation (+).

10/513699



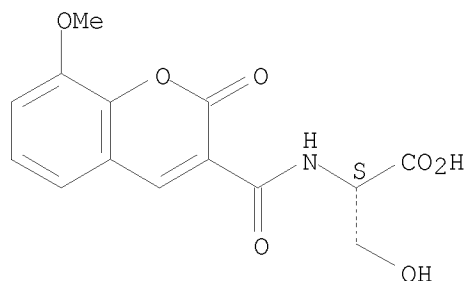
RN 256658-68-1 CAPLUS  
CN L-Methionine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 256658-69-2 CAPLUS  
CN L-Serine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

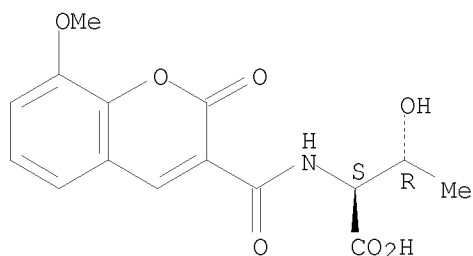


RN 256658-70-5 CAPLUS  
CN L-Threonine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

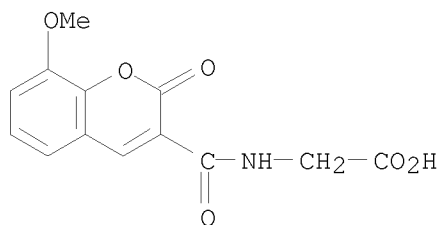
Absolute stereochemistry. Rotation (+).



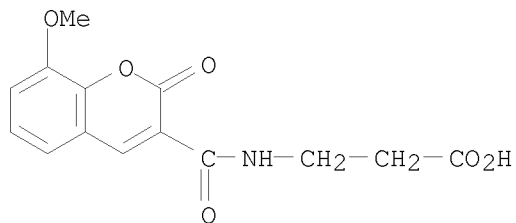
10/513699



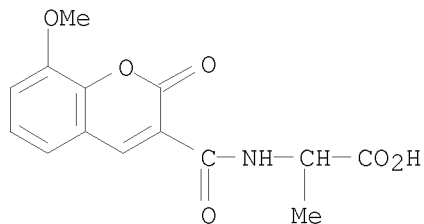
RN 256658-71-6 CAPLUS  
CN Glycine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



RN 256658-72-7 CAPLUS  
CN β-Alanine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



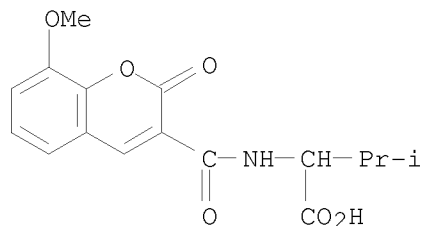
RN 256658-73-8 CAPLUS  
CN Alanine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



10/513699

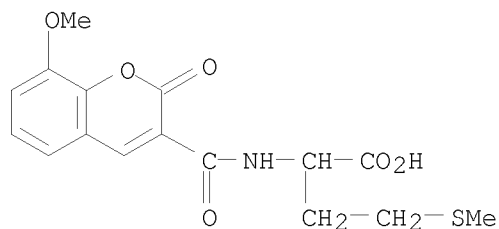
RN 256658-74-9 CAPLUS

CN Valine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



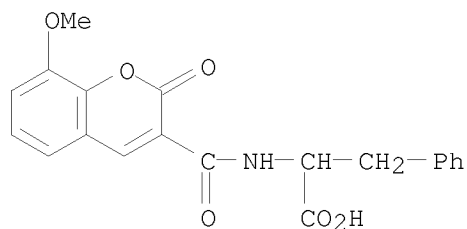
RN 256658-75-0 CAPLUS

CN Methionine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



RN 256658-76-1 CAPLUS

CN Phenylalanine, N-[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



IT 119686-24-7

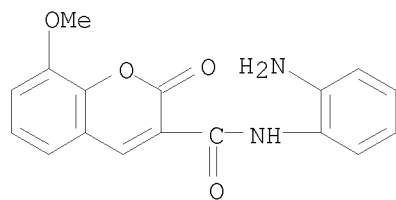
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and antibacterial activity of coumarin sulfonamide and amino acid derivs.)

RN 119686-24-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminophenyl)-8-methoxy-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 3

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

REFERENCE COUNT: 16

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 82 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:719669 CAPLUS

DOCUMENT NUMBER: 132:151648

TITLE: Synthesis and mass spectra of 3-acetylcoumarin derivatives

AUTHOR(S): Soliman, A. Y.

CORPORATE SOURCE: Chemistry Department, Faculty of Science at Fayoum, Cairo University, El-Fayoum, Egypt

SOURCE: Bulletin of the Faculty of Science, Assiut University, B: Chemistry (1998), 27(1), 19-39  
CODEN: BFSAE6; ISSN: 1010-2671

PUBLISHER: Assiut University

DOCUMENT TYPE: Journal

LANGUAGE: English

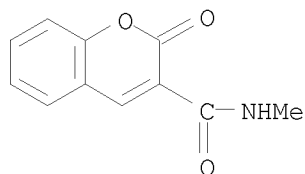
AB 3-Acetylcoumarin (I) condensed with Et acetate, Me or Et oxalate in the presence of Na metal to give 3-coumarinoylacetone and 3-coumarinoylpyruvic acid, which was converted into 3-substituted pyrimidinylcoumarin. I condensed with 4-N,N-dimethylaminobenzaldehyde in the presence of piperidine to give the corresponding 3-styrylcoumarin. This compound reacted with active methylene compds. under Michael reaction conditions to give a benzoxazcine derivative and pyridocoumarin derivs. The reactivity of I and its 6-bromo derivative towards Schiff base and hydrogen cyanide have been studied. I reacted with thiourea in the presence of bromine water to give imidazolylcoumarin. 3-N-Alkylcarbamoylecoumarins were prepared Also, mass fragmentation of some products were studied to confirm the structure proposed of these compds.

IT 1846-79-3P 1846-83-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and mass spectra of acetylcoumarin derivs.)

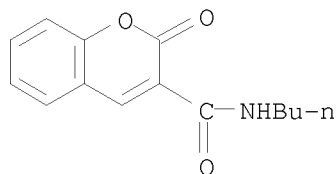
RN 1846-79-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-methyl-2-oxo- (CA INDEX NAME)



RN 1846-83-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-butyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

<12/04/2007>

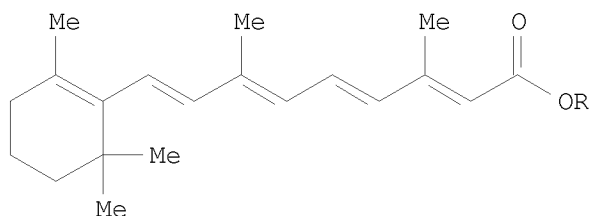
Erich Leese

10/513699

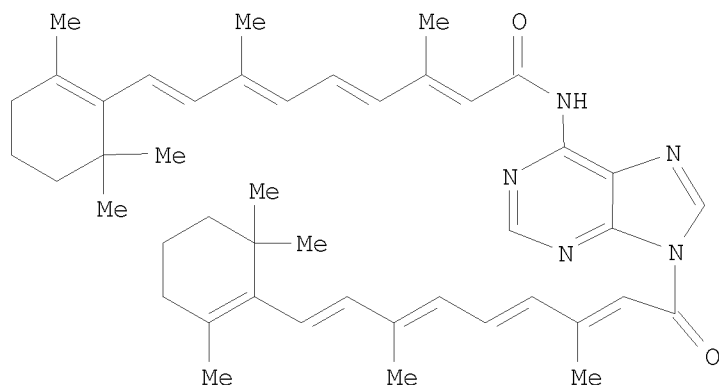
L9 ANSWER 83 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1999:670115 CAPLUS  
DOCUMENT NUMBER: 131:299576  
TITLE: Preparation of anticancer retinoids  
INVENTOR(S): Han, Rui; Yuan, Zang-liang  
PATENT ASSIGNEE(S): Institute of Materia Medica, Peop. Rep. China  
SOURCE: U.S., 15 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5968940	A	19991019	US 1996-657885	19960607 <--
PRIORITY APPLN. INFO.:			US 1995-58P	P 19950608

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
GI



I



II

AB New purine retinoid compds. I (R = purine derivative) were prepared as anticancer

agents. Thus retinoic acid was converted to the acid chloride with PCl<sub>3</sub> and then treated with purine to give the purine retinoid II. Several coumarin retinoids were also prepared. At 2 mg/kg x 10 II inhibited the growth of chondrosarcoma in rats by 49%.

IT 186303-80-0, Xsp5-5a 186303-81-1, Xsp5-3b

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

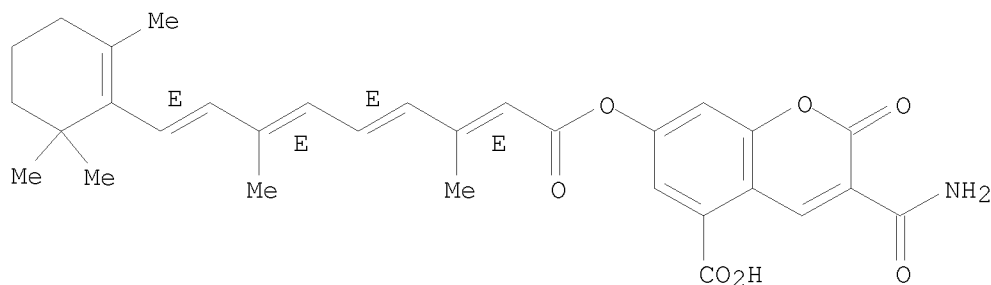
(preparation of anticancer retinoids)

10/513699

RN 186303-80-0 CAPLUS

CN Retinoic acid, 3-(aminocarbonyl)-5-carboxy-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

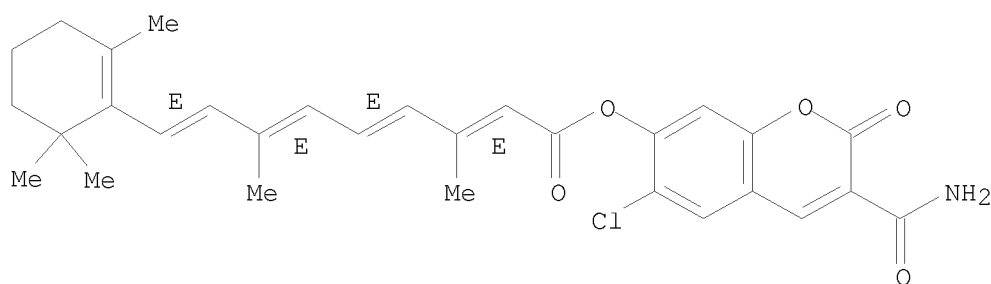
Double bond geometry as shown.



RN 186303-81-1 CAPLUS

CN Retinoic acid, 3-(aminocarbonyl)-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 84 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:662330 CAPLUS

DOCUMENT NUMBER: 132:12456

TITLE: Synthesis and biological evaluation of coumarin-carboxylic acids as inhibitors of gyrase B. L-rhamnose as an effective substitute for L-noviose

AUTHOR(S): Ferroud, Didier; Collard, Jeannine; Klich, Michel; Dupuis-Hamelin, Claudine; Mauvais, Pascale; Lassaigue, Patrice; Bonnefoy, Alain; Musicki, Branislav

CORPORATE SOURCE: Medicinal Chemistry, Hoechst Marion Roussel, Romainville, 93235, Fr.

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(19), 2881-2886

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of novobiocin-like coumarin-carboxylic acids has been prepared bearing the L-rhamnosyl moiety as the sugar portion of the mol. The similar DNA gyrase inhibitory activity of the novel class of coumarins to that of novobiocin demonstrates that L-rhamnose can effectively replace L-noviose. Introduction of alkyl side-chains at C-5 of coumarin leads to improved in vitro antibacterial properties in the novel series.

IT 251361-28-1P

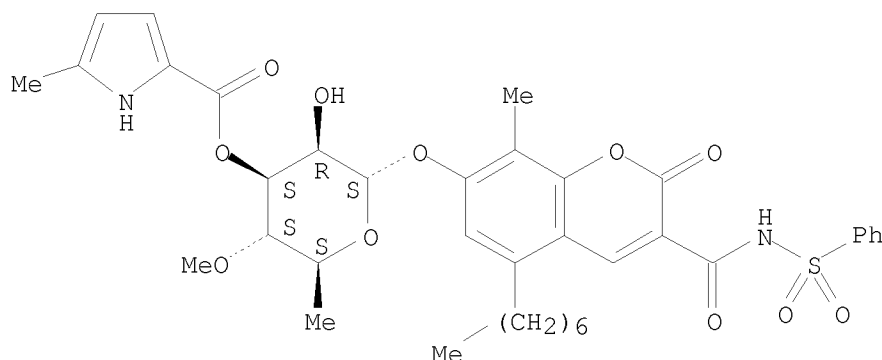
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and biol. evaluation of coumarin-carboxylic acids as inhibitors of gyrase B)

RN 251361-28-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-[[[6-deoxy-4-O-methyl-3-O-[(5-methyl-1H-pyrrol-2-yl)carbonyl]- $\alpha$ -L-mannopyranosyl]oxy]-5-heptyl-8-methyl-2-oxo-N-(phenylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 85 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:614248 CAPLUS

DOCUMENT NUMBER: 131:225804

TITLE: Systems having vascularized perfused  
microtissue/micro-organ arrays and sensorsINVENTOR(S): Griffith, Linda G.; Tannenbaum, Steven R.; Powers,  
Mark J.; Domansky, Karel; Thompson, Charles D.

PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9947922	A2	19990923	WO 1999-US5974	19990318 <--
W: CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2324208	C	20090630	CA 1999-2324208	19990318
PRIORITY APPLN. INFO.:			US 1998-78452P	P 19980318
			WO 1999-US5974	W 19990318

AB Systems including (1) a micromatrix and perfusion assembly suitable for seeding and attachment of cells within the matrix and for morphogenesis of seeded cells into complex, hierarchical tissue or organ structures, wherein the matrix includes channels or vessels through which culture medium, oxygen, or other nutrient or body fluids can be perfused while controlling gradients of nutrients and exogenous metabolites throughout the perfusion path independently of perfusion rate, and (2) sensor means for detecting changes in either cells within the matrix or in materials exposed to the cells, have been developed. Methods for making the micromatrices include micromachining, micromolding, embossing, laser drilling, and electro deposition machining. Cells can be of one or more types, either differentiated or undifferentiated. In a preferred embodiment, the matrix is seeded with a mixture of cells including endothelial cells which will line the channels to form "blood vessels", and at least one type of parenchymal cells, such as hepatocytes, pancreatic cells, or other organ cells. The system can be used to screen materials for an effect on the cells, for an effect of the cells on the materials (for example, in a manner equivalent to tissue metabolism of a

drug), or  
to test a material on a biol. that must first infect cells or tissues, such as viruses. The apparatus also can be used to provide a physiol. environment for expansion of stem cells, or for enabling gene therapy in vitro.

IT 183736-69-8

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(as fluorescent indicator for transfection; systems having vascularized perfused microtissue/micro-organ arrays and sensors)

RN 183736-69-8 CAPLUS

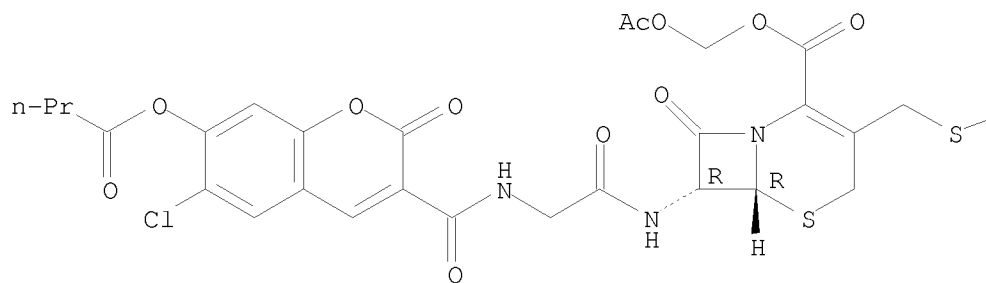
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
(CA INDEX NAME)

10/513699

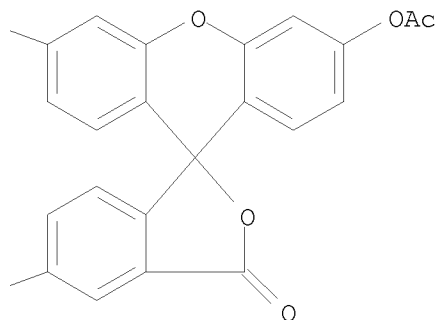
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT: 9

REFERENCE COUNT: 9

THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

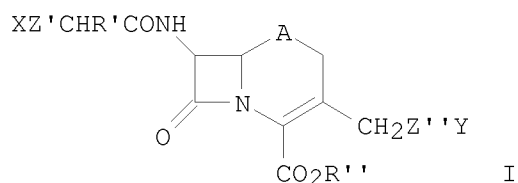
Erich Leese

L9 ANSWER 86 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1999:606991 CAPLUS  
 DOCUMENT NUMBER: 131:225488  
 TITLE: Fluorogenic  $\beta$ -lactam preparation and  
 $\beta$ -lactamase reporter gene assay for animal cell  
 transcription, transfection, or antibiotic resistance  
 INVENTOR(S): Tsien, Roger Y.; Zlokarnik, Gregor  
 PATENT ASSIGNEE(S): The Regents of the University of California, USA  
 SOURCE: U.S., 58 pp., Cont. of U. S. Ser. No. 727,616.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5955604	A	19990921	US 1997-955401	19971021 <--
US 6291162	B1	20010918	US 1996-727616	19961015 <--
PRIORITY APPLN. INFO.:			US 1996-727616	A1 19961015
			US 1996-732178	A1 19961016
			US 1995-407544	A2 19950320
			WO 1996-US4059	W 19960320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 131:225488  
 GI



AB Substrates for  $\beta$ -lactamase are provided of the general formula I in which one of X and Y is a fluorescent donor moiety and the other is a quencher (which may or may not re-emit); R' is selected from the group consisting of H, lower (i.e., alkyl of 1 to about 5 carbon atoms) and (CH<sub>2</sub>)<sub>n</sub>OH, in which n is 0 or an integer from 1 to 5; R'' is selected from the group consisting of H, physiol. acceptable metal and ammonium cations, -CHR<sub>2</sub>OCO(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, -CHR<sub>2</sub>OCOC(CH<sub>3</sub>)<sub>3</sub>, acylthiomethyl, acyloxy- $\alpha$ -benzyl,  $\delta$ -butyrolactonyl, methoxycarbonyloxymethyl, Ph, methylsulfinylmethyl,  $\beta$ -morpholinoethyl, dialkylaminoethyl, acyloxyalkyl, dialkylaminocarbonyloxymethyl and aliphatic, in which R<sub>2</sub> is selected from the group consisting of H and lower alkyl; A is selected from the group consisting of S, O, SO, SO<sub>2</sub> and CH<sub>2</sub>; and Z' and Z'' are linkers for the fluorescent donor and quencher moieties. Methods of assaying  $\beta$ -lactamase activity and monitoring expression in systems using  $\beta$ -lactamase as a reporter gene also are disclosed. Examples include Drosophila or zebrafish embryo transformation assays as well as animal cell glucocorticoid receptor-mediated or  $\beta$ -adrenergic receptor-mediated transcription assays.

IT 183736-52-9P

RL: ARG (Analytical reagent use); BPR (Biological process); BSU

10/513699

(Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(CCF2, preparation and reaction with acetoxymethylbromide,  $\beta$ -lactam fluorogenic derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

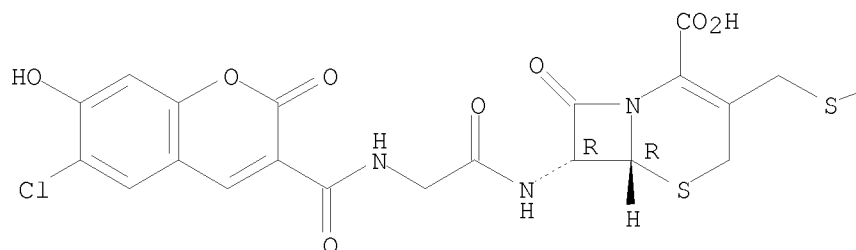
RN 183736-52-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3-[[ (3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

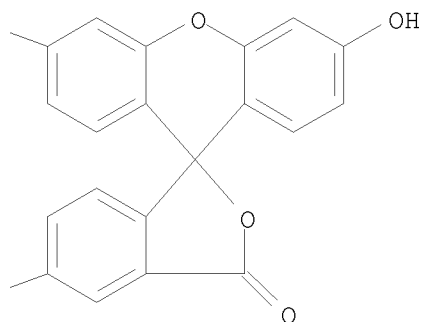
Absolute stereochemistry.

PAGE 1-A

HO—



PAGE 1-B



IT 183736-66-5P

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP

<12/04/2007>

Erich Leese

10/513699

(Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(CCF2/ac2AM2, preparation, membrane permeable  $\beta$ -lactam fluorogenic derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

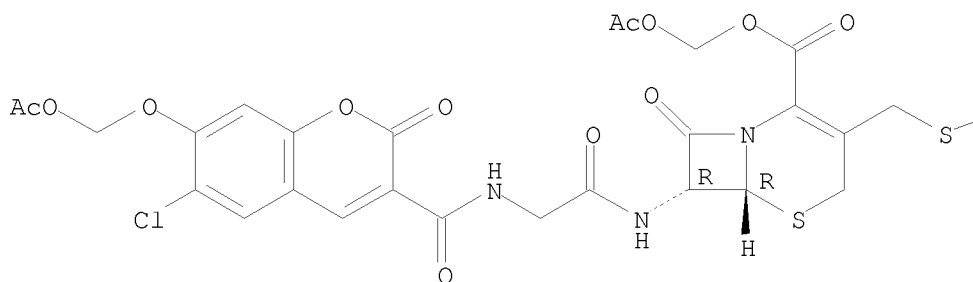
RN 183736-66-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[[[7-[(acetyloxy)methoxy]-6-chloro-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-8-oxo-,  
(acetyloxy)methyl ester, (6R,7R)- (9CI) (CA INDEX NAME)

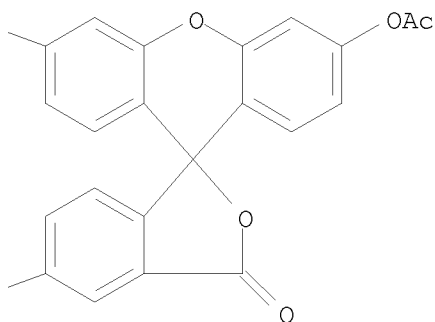
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



IT 183736-69-8P

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

<12/04/2007>

Erich Leese

10/513699

(CCF2/btAMac2, preparation, membrane permeant  $\beta$ -lactam fluorogenic derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

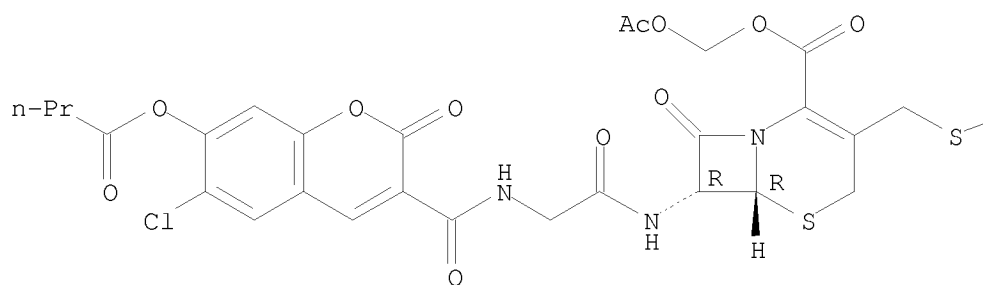
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-(CA INDEX NAME)

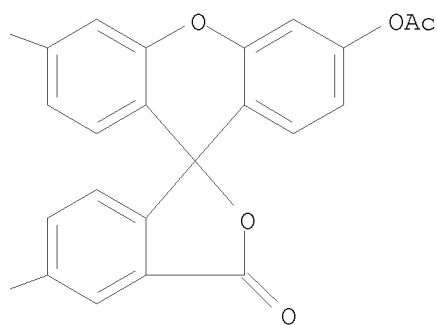
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



IT 183736-68-7

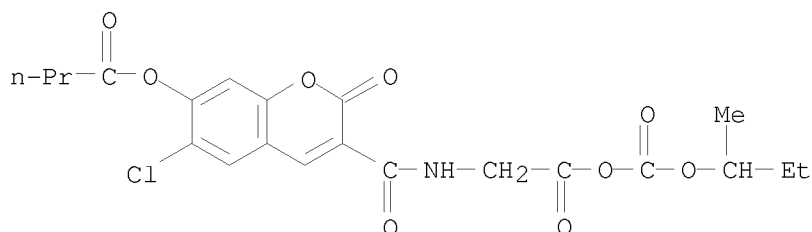
RL: RCT (Reactant); RACT (Reactant or reagent)

(coupling reaction with fluorescein-cephalosporanic acid derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

RN 183736-68-7 CAPLUS

10/513699

CN Butanoic acid, 6-chloro-3-[[[2-[[[(1-methylpropoxy)carbonyl]oxy]-2-oxoethyl]amino]carbonyl]-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



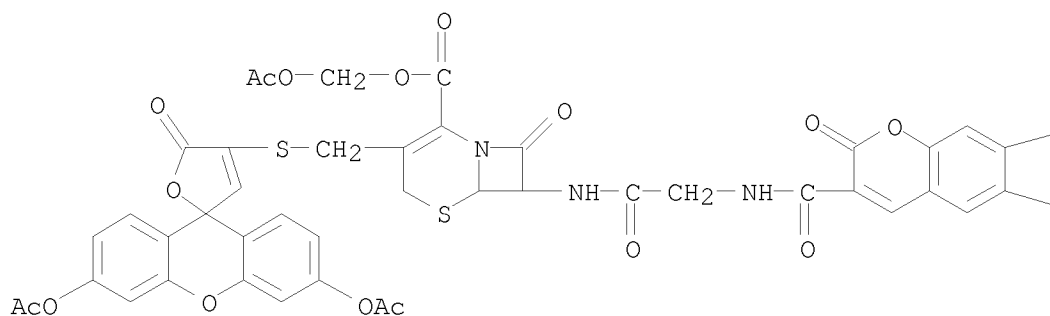
IT 183736-85-8 183736-86-9  
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

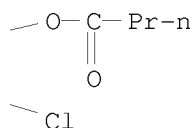
RN 183736-85-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-5-oxospiro[furan-2(5H),9'-[9H]xanthen]-4-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



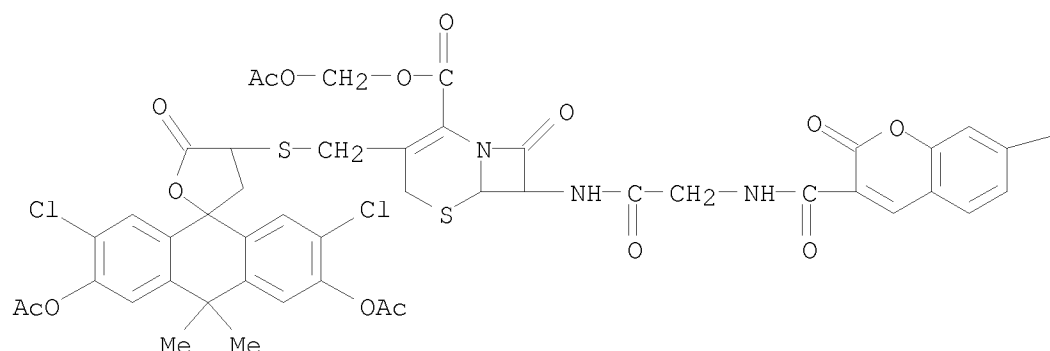
<12/04/2007>

Erich Leese

10/513699

RN 183736-86-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[2-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]acetyl]amino]-3-[[[3,6-bis(acetyloxy)-2,7-dichloro-4',5'-  
dihydro-10,10-dimethyl-5'-oxospiro[anthracene-9(10H),2'(3'H)-furan]-4'-  
yl]thio]methyl]-8-oxo-, (acetyloxy)methyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—OAc

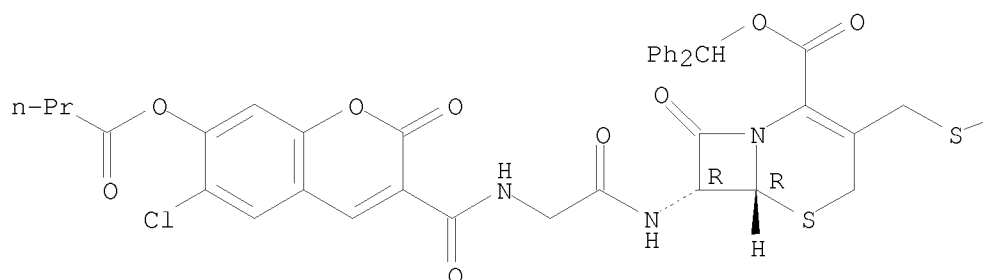
IT 183736-83-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and cleavage reaction; fluorogenic  $\beta$ -lactam preparation and  
 $\beta$ -lactamase reporter gene assay for animal cell transcription,  
transfection, or antibiotic resistance)  
RN 183736-83-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-  
yl]thio]methyl]-7-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-  
yl]carbonyl]amino]acetyl]amino]-8-oxo-, diphenylmethyl ester, (6R,7R)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

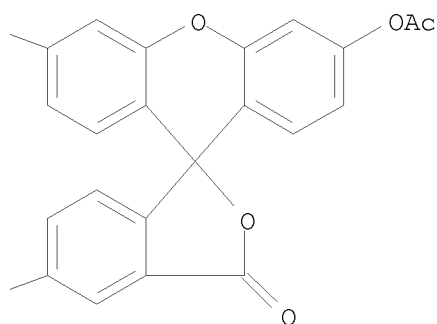


PAGE 1-A

AcO



PAGE 1-B



IT 183736-49-4P

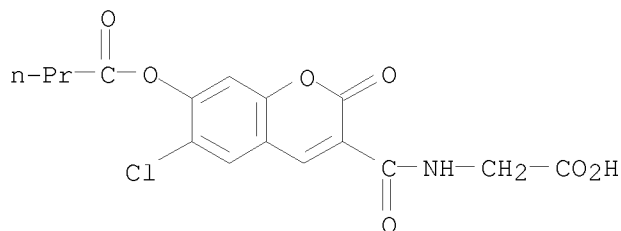
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and coupling reaction with cephalosporanic acid derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

RN 183736-49-4 CAPLUS

CN Butanoic acid, 3-[[[(carboxymethyl)amino]carbonyl]-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)

10/513699



IT 183736-63-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

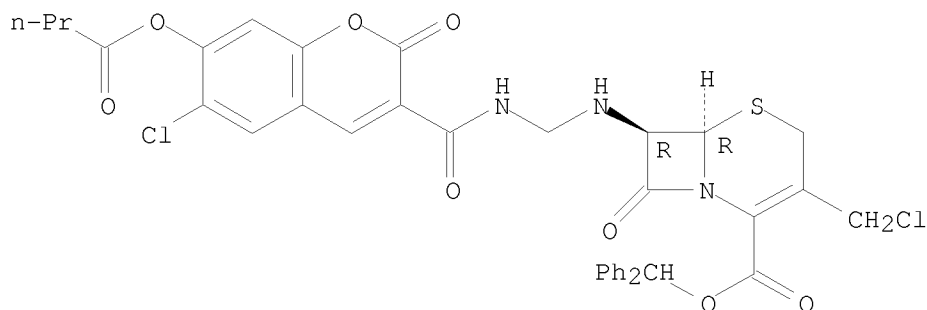
(preparation and coupling reaction with fluoresceinthiol derivative; fluorogenic

$\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

RN 183736-63-2 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-(chloromethyl)-7-[[[[(6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]amino]-8-oxo-, diphenylmethyl ester, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



IT 183736-64-3P 183736-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and deprotection; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

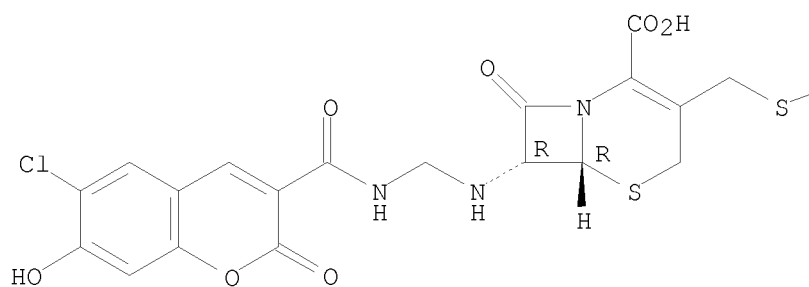
RN 183736-64-3 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]amino]-3-[[ (3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-, (6R,7R)- (CA INDEX NAME)

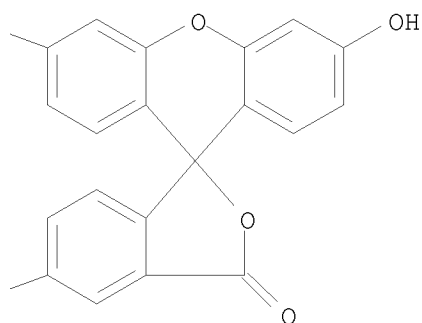
Absolute stereochemistry.

PAGE 1-A

HO—

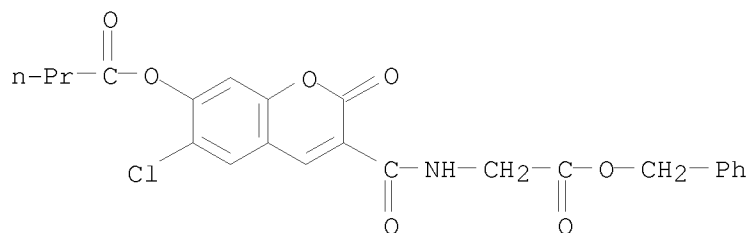


PAGE 1-B



RN 183736-75-6 CAPLUS

CN Butanoic acid, 6-chloro-2-oxo-3-[[[2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



IT 183736-84-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and reaction with bromomethylacetate; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

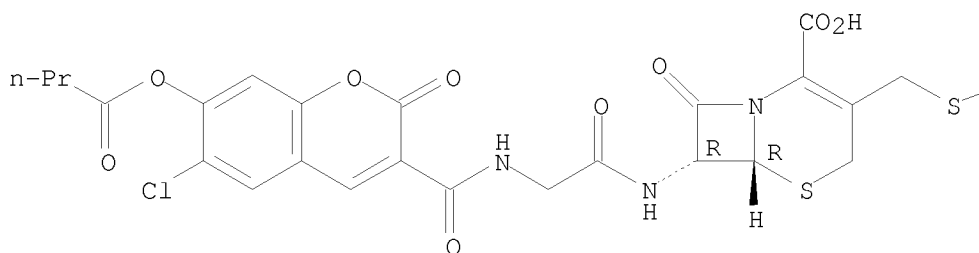
RN 183736-84-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

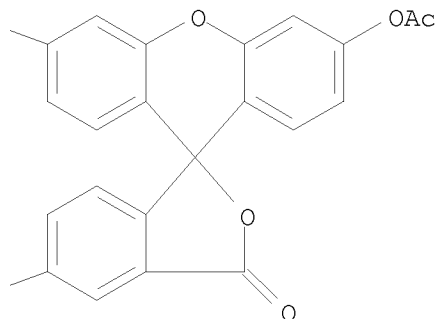
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



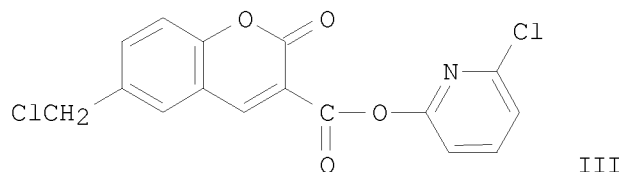
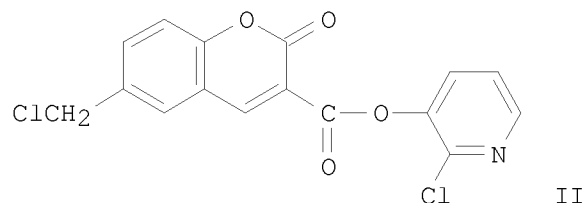
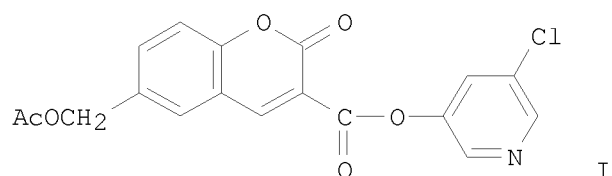
OS.CITING REF COUNT: 6

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 83

THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

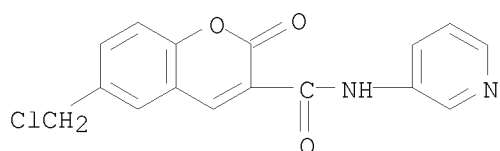
L9 ANSWER 87 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1999:574262 CAPLUS  
 DOCUMENT NUMBER: 131:319647  
 TITLE: 6-Substituted 2-Oxo-2H-1-benzopyran-3-carboxylic Acid  
 as a Core Structure for Specific Inhibitors of Human  
 Leukocyte Elastase  
 AUTHOR(S): Doucet, Caroline; Pochet, Lionel; Thierry, Nicole;  
 Pirotte, Bernard; Delarge, Jacques; Reboud-Ravaux,  
 Michele  
 CORPORATE SOURCE: Laboratoire d'Enzymologie Moleculaire et Fonctionnelle  
 Departement de Biologie Supramoleculaire et Cellulaire  
 Institut Jacques Monod, Universites Paris VI and Paris  
 VII, Paris, F-75251, Fr.  
 SOURCE: Journal of Medicinal Chemistry (1999),  
 42(20), 4161-4171  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



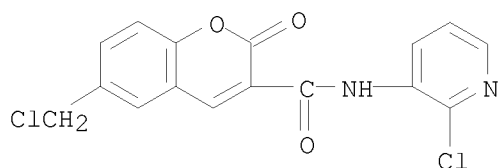
AB Pyridyl esters of 6-substituted 2-oxo-2H-1-benzopyran-3-carboxylic acid were designed as mechanism-based inhibitors of human leukocyte elastase. Compds. of chloropyridylbenzopyran carboxylates (e.g., I) specifically inhibited this enzyme. Several of the tested compds. [substituted pyridylchloromethylbenzopyran carboxylates (e.g., II and III)] acted as powerful time-dependent inhibitors of both human leukocyte elastase and  $\alpha$ -chymotrypsin; some compds. of these series inhibited thrombin. Trypsin was not inhibited. A transient inactivation was observed for human leukocyte elastase ( $k_i/K_I = 107\,000\text{ M}^{-1}\cdot\text{s}^{-1}$  for I) and thrombin ( $k_i/K_I = 7\,200\text{ M}^{-1}\cdot\text{s}^{-1}$  for III) as demonstrated by spontaneous or

hydroxylamine-accelerated reactivation, irres. of the nature of the substituent at the 6-position. Conversely,  $\alpha$ -chymotrypsin was irreversibly inhibited by 6-chloromethyl derivs. ( $k_i/K_i = 10^7$   $400 \text{ M}^{-1}\text{s}^{-1}$  for III). The presence of a latent alkylating function at the 6-position (chloromethyl group) was required for leading to this inactivation. In the absence of such an alkylating function (e.g., I), human leukocyte elastase was specifically inhibited suggesting that this new series of human leukocyte elastase inhibitors may be of potential therapeutic interest in degradative and degenerative processes involving this enzyme.

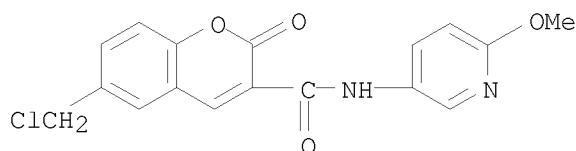
IT 217081-85-1P 217081-86-2P 217081-87-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and structure activity relations of oxobenzopyrancarboxylate derivs. as inhibitors of serine proteases and human leukocyte elastase)  
 RN 217081-85-1 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-3-pyridinyl- (CA INDEX NAME)



RN 217081-86-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-(2-chloro-3-pyridinyl)-2-oxo- (CA INDEX NAME)



RN 217081-87-3 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-(6-methoxy-3-pyridinyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (45 CITINGS)  
 REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

<12/04/2007>

Erich Leese

10/513699

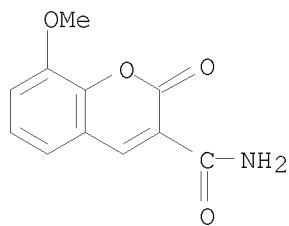
L9 ANSWER 88 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1999:564198 CAPLUS  
DOCUMENT NUMBER: 131:310613  
TITLE: Azoles and azines: CVIII. Reactions of  
4,6-dihydroxypyrimidine with salicylic aldehydes  
AUTHOR(S): Moskvina, A. V.; Reznikova, N. R.; Ivin, B. A.  
CORPORATE SOURCE: St. Petersburg State Chemical and Pharmaceutical  
Academy, St. Petersburg, Russia  
SOURCE: Russian Journal of General Chemistry (Translation of  
Zhurnal Obshchei Khimii) (1999), 69(4),  
620-628  
CODEN: RJGCEK; ISSN: 1070-3632  
PUBLISHER: MAIK Nauka/Interperiodica Publishing  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Condensation of 4,6-dihydroxypyrimidine with salicylic aldehydes I (R = H, HO, Cl, MeO; R1 = H, HO; R2 = H, Br, Cl, NO2) gave four kinds of products: 5,5'-salicylidenebis(dihydroxypyrimidines) II, N-formylcoumarincarboxamides III, 3-coumarincarboxamides IV, and 4H-chromeno[4,3-d]pyrimidines V. The formation of the three latter involves opening of the pyrimidine ring in the initial 4,6-dihydroxypyrimidine.

IT 1728-88-7P 1846-78-2P 38472-56-9P  
83090-96-4P 247219-37-0P 247219-38-1P  
247219-39-2P 247219-40-5P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of chromenopyrimidines, coumarincarboxamides, and salicylidenebis(dihydroxypyrimidines) by condensation of pyrimidinediols with salicylaldehydes)

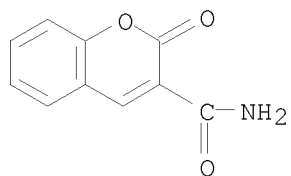
RN 1728-88-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo- (CA INDEX NAME)



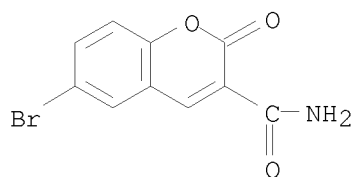
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



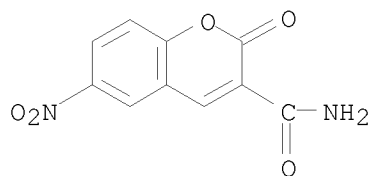
10/513699



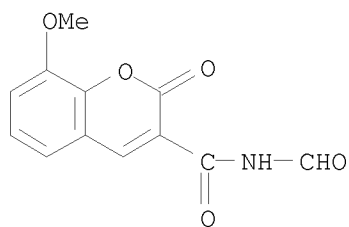
RN 38472-56-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo- (CA INDEX NAME)



RN 83090-96-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo- (CA INDEX NAME)

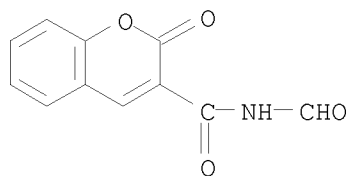


RN 247219-37-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-formyl-8-methoxy-2-oxo- (CA INDEX NAME)



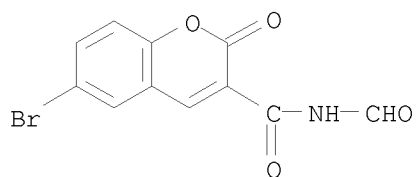
RN 247219-38-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-formyl-2-oxo- (CA INDEX NAME)

10/513699



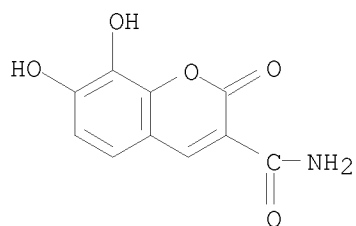
RN 247219-39-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-formyl-2-oxo- (CA INDEX NAME)



RN 247219-40-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7,8-dihydroxy-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	23	THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 89 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:564131 CAPLUS

DOCUMENT NUMBER: 131:280560

TITLE: Light-Harvesting Arrays with Coumarin Donors and MLCT Acceptors

AUTHOR(S): Tyson, Daniel S.; Castellano, Felix N.

CORPORATE SOURCE: Department of Chemistry and Center for Photochemical Sciences, Bowling Green State University, Bowling Green, OH, 43403, USA

SOURCE: Inorganic Chemistry (1999), 38(20), 4382-4383

CODEN: INOCAJ; ISSN: 0020-1669

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

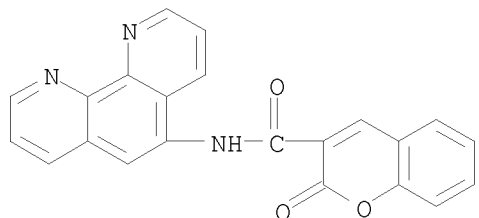
AB [Ru(bpy)2(L1)](PF6)2 and [Ru(L1)3](PF6)2 (I; L1 = 5-(3-amidocoumarin)-1,10-phenanthroline) were prepared to study spectral and photophys. properties of light-harvesting compds. composed of organic donor mols. covalently linked to the ligand periphery of Ru(II) centers. [Ru(bpy)2(L2)](PF6)2 and [Ru(L2)3](PF6)2 (II; L2 = 5-amidomethyl-1,10-phenanthroline) were also prepared and studied to model the amide linkages in I. N-isopropyl-3-carboxamidocoumarin was prepared and studied to model the photophys. properties of the energy transfer donor in the absence of the acceptors in I. Large quantum yields and lifetimes of emission for the dyad and tetrad (I and II) were observed. This work provides a strategy for the generation of light-harvesting arrays superior to polynuclear arrays in that the absorption cross sections are optimized without neg. affecting the photophys. properties of the MLCT chromophore.

IT 245499-10-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(for preparation of ruthenium (amidocoumarin)phenanthroline complex light-harvesting arrays)

RN 245499-10-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-1,10-phenanthrolin-5-yl- (CA INDEX NAME)



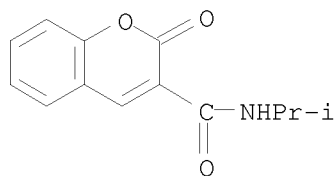
IT 1846-82-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation for comparison with ruthenium (amidocoumarin)phenanthroline complex light-harvesting arrays)

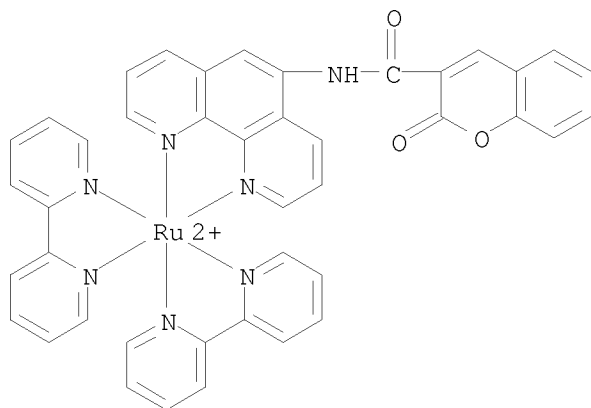
RN 1846-82-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(1-methylethyl)-2-oxo- (CA INDEX NAME)

10/513699

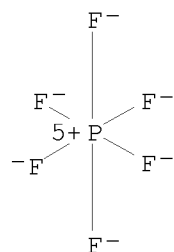


IT 245499-04-1P 245499-06-3P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation, spectra and photophys. properties as synthetic  
light-harvesting array)  
RN 245499-04-1 CAPLUS  
CN Ruthenium(2+), bis(2,2'-bipyridine- $\kappa$ N1, $\kappa$ N1') [2-oxo-N-(1,10-  
phenanthrolin-5-yl- $\kappa$ N1, $\kappa$ N10)-2H-1-benzopyran-3-carboxamide]-,  
(OC-6-33)-, bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 245499-03-0  
CMF C42 H29 N7 O3 Ru  
CCI CCS



CM 2  
  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

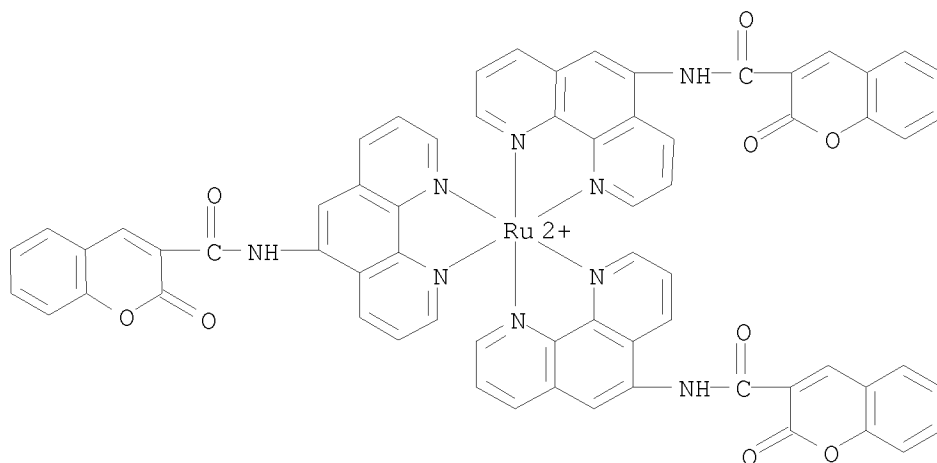
10/513699



RN 245499-06-3 CAPLUS  
CN Ruthenium(2+), tris[2-oxo-N-(1,10-phenanthrolin-5-yl-κN1,κN10)-  
2H-1-benzopyran-3-carboxamide]-, bis[hexafluorophosphate(1-)] (9CI) (CA  
INDEX NAME)

CM 1

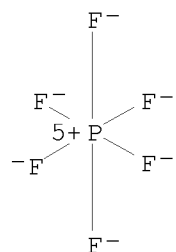
CRN 245499-05-2  
CMF C66 H39 N9 O9 Ru  
CCI CCS



CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS

10/513699



OS.CITING REF COUNT:	34	THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)
REFERENCE COUNT:	21	THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 90 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:526234 CAPLUS

DOCUMENT NUMBER: 131:308477

TITLE: Fluorescent labelling of closely-spaced aldehydes induced in DNA by bleomycin-Fe(III)

AUTHOR(S): Chakrabarti, S.; Mahmood, A.; Makrigiorgos, G. M.

CORPORATE SOURCE: Joint Center for Radiation Therapy and Dana Farber Cancer Institute, Harvard Medical School, Boston, MA, 02215, USA

SOURCE: International Journal of Radiation Biology (1999), 75(8), 1055-1065

CODEN: IJRBE7; ISSN: 0955-3002

PUBLISHER: Taylor &amp; Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The purpose of this study was to test the ability of two novel fluorescent reagents fluorescent aldehyde-reactive probe (FARP) and FARPhc, to label aldehyde-containing sites (principally abasic sites) generated in DNA by the radiomimetic drug bleomycin, and to use fluorescent energy transfer from FARPhc (donor) to FARP (acceptor) to quantitate such closely-spaced sites. FARPhc, 7-hydroxycoumarin-3-carboxylic acid (((((amino-oxymethyl) carbonyl) hydrazino) carbonyl)ethyl) amide) was synthesized with a protocol similar to the one recently reported for FARP (a fluorescein-based probe). Both FARPhc and FARP form stable oxime bonds with the open-chain aldehydes generated upon acidic depurination of DNA. Plasmid DNA exposed to bleomycin-Fe(III)-ascorbate undergoes extensive strand breakage, and upon subsequent reaction with FARPhc and/or FARP it becomes fluorescently labeled, indicating the generation of aldehyde-containing sites. The binding of the probes to calf thymus or plasmid DNA results in significant fluorescent energy transfer among closely-spaced fluorophores, as revealed by the fluorescence increase following digestion of fluorescently labeled samples with nuclease P1. The fluorescence quenching is most evident when both FARPhc and FARP are used simultaneously to trap aldehyde sites. When single-stranded oligonucleotides engineered to contain either one or two closely spaced bleomycin binding sites are exposed to bleomycin and then fluorescently labeled, the oligonucleotides demonstrate significantly increased fluorescent energy transfer with two binding sites indicating a dependence of aldehyde site generation and clustering on the local sequence of a single strand. In conclusion, a new detection method for DNA damage induced by bleomycin following fluorescent labeling of aldehyde group-containing sites (FLAGS) and their clustering via fluorescent energy transfer is demonstrated. The method is applicable to any form of DNA. This work may lead to a general approach for the quantification of multiply damaged sites in DNA, a subset of DNA lesions that may have major biol. significance.

IT 247194-86-1P, FARPhc

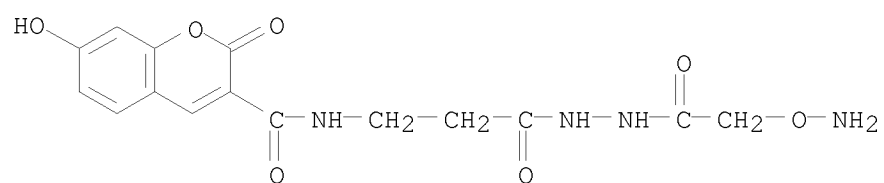
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(fluorescent labeling of closely-spaced aldehydes induced in DNA by bleomycin-Fe)

RN 247194-86-1 CAPLUS

CN Propanoic acid, 3-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-[(aminoxy)acetyl]hydrazide (9CI) (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:	6	THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT:	34	THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 91 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:508478 CAPLUS

DOCUMENT NUMBER: 131:269146

TITLE: Identification of neural circuits by imaging coherent electrical activity with FRET-based dyes

AUTHOR(S): Cacciatore, Timothy W.; Brodfuehrer, Peter D.; Gonzalez, Jesus E.; Jiang, Tao; Adams, Stephen R.; Tsien, Roger Y.; Kristan, William B., Jr.; Kleinfeld, David

CORPORATE SOURCE: Group in Neurosciences, University of California, San Diego, La Jolla, CA, 92093, USA

SOURCE: Neuron (1999), 23(3), 449-459

CODEN: NERNET; ISSN: 0896-6273

PUBLISHER: Cell Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We show that neurons that underlie rhythmic patterns of elec. output may be identified by optical imaging and frequency-domain anal. Our contrast agent is a two-component dye system in which changes in membrane potential modulate the relative emission between a pair of fluorophores. We demonstrate our methods with the circuit responsible for fictive swimming in the isolated leech nerve cord. The output of a motor neuron provides a reference signal for the phase-sensitive detection of changes in fluorescence from individual neurons in a ganglion. We identify known and possibly novel neurons that participate in the swim rhythm and determine their phases within a cycle. A variant of this approach is used to identify the postsynaptic followers of intracellularly stimulated neurons.

IT 245406-63-7 245406-64-8

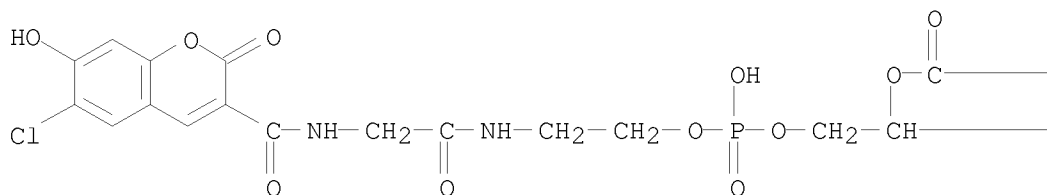
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

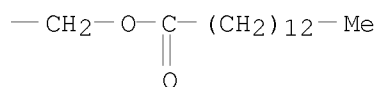
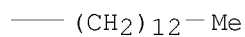
(identification of neural circuits by imaging coherent elec. activity with FRET-based dyes)

RN 245406-63-7 CAPLUS

CN Tetradecanoic acid, 1-[[[2-[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]ethoxy]hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

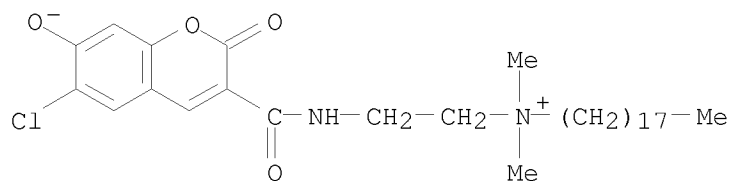
PAGE 1-A





RN 245406-64-8 CAPLUS

CN 1-Octadecanaminium, N-[2-[[[6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyl]-N,N-dimethyl-, inner salt (CA INDEX NAME)



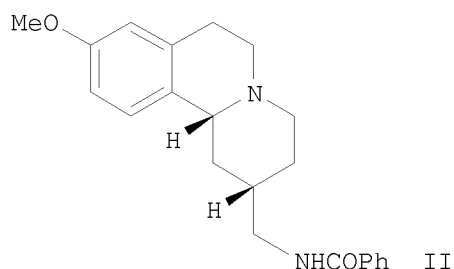
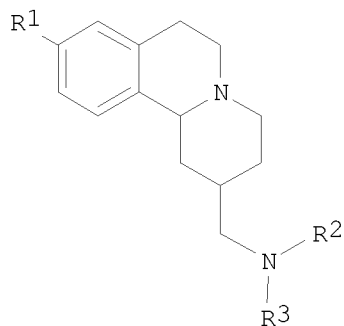
OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS  
RECORD (33 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 92 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1999:297420 CAPLUS  
DOCUMENT NUMBER: 130:338280  
TITLE: Preparation of (aminomethyl)benzo[a]quinolizidine  
derivatives for therapeutic applications for  
neurodegenerative diseases  
INVENTOR(S): Mayer, Patrice; Vidaluc, Jean-Louis; Imbert, Thierry;  
Marien, Marc  
PATENT ASSIGNEE(S): Pierre Fabre Medicament, Fr.  
SOURCE: PCT Int. Appl., 81 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 9921856	A1	19990506	WO 1998-FR2281	19981026 <--
W: AU, BR, CA, CN, JP, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2770215	A1	19990430	FR 1997-13499	19971028 <--
FR 2770215	B1	20000114		
CA 2307748	A1	19990506	CA 1998-2307748	19981026 <--
AU 9897517	A	19990517	AU 1998-97517	19981026 <--
EP 1027350	A1	20000816	EP 1998-951548	19981026 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9813303	A	20000829	BR 1998-13303	19981026 <--
JP 2001521034	T	20011106	JP 2000-517966	19981026 <--
MX 2000004199	A	20001110	MX 2000-4199	20000428 <--
PRIORITY APPLN. INFO.:			FR 1997-13499	A 19971028
			WO 1998-FR2281	W 19981026
OTHER SOURCE(S):			MARPAT 130:338280	
GI				



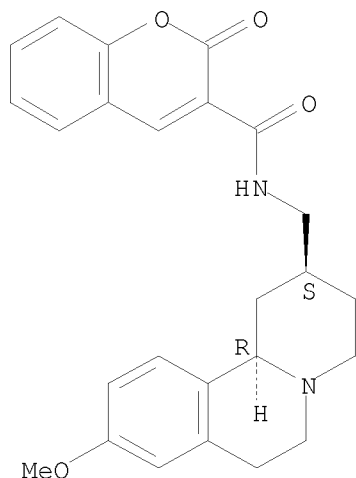
AB The 2-(aminomethyl)benzo[a]quinolizidine derivs. I (R1 = H, branched,  
linear or cyclic C1-C4 alkyl group, a branched linear or cyclic C1-C4

10/513699

hydroxy or alkoxy group, or a halogen atom such as F or Cl; R2 = H, or a C1-C6 alkyl group; R3 = hydrogen atom or can constitute a unit (C=X)NR4R5 and in that case constitutes a urea or thiourea with X = oxygen or sulfur; R4 and R5 can independently be a hydrogen atom or a linear, branched, cyclic C1-C8 alkyl group, aryl, aralkyl, aroyl group, said aryl groups capable of being substituted as well; R4 and R5 can be bound by a carbon chain optionally incorporating a heteroatom) were prepared. Thus, the 2-(aminomethyl)benzo[a]quinolizidine derivative II was prepared in 6 steps starting from 3-methoxyphenethylamine via 9-methoxy-1,3,4,6,7,11b-hexahydro-2H-benzo[a]quinolizine-2-one. The ED50 of II against guanabenz induced hypothermia is 0.63 mg/kg IP.

IT 224158-66-1P 224158-67-2P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of aminomethylbenzo[a]quinolizidine derivs. for therapeutic applications for neurodegenerative diseases)  
RN 224158-66-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[[ (2R,11bS)-1,3,4,6,7,11b-hexahydro-9-methoxy-2H-benzo[a]quinolizin-2-yl]methyl]-2-oxo-, rel- (CA INDEX NAME)

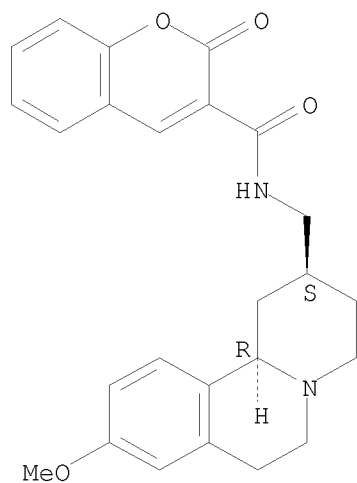
Relative stereochemistry.



RN 224158-67-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[[ (2R,11bS)-1,3,4,6,7,11b-hexahydro-9-methoxy-2H-benzo[a]quinolizin-2-yl]methyl]-2-oxo-, ethanedioate (1:1), rel- (CA INDEX NAME)  
CM 1  
CRN 224158-66-1  
CMF C25 H26 N2 O4

Relative stereochemistry.

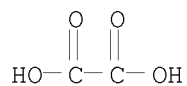
10/513699



CM 2

CRN 144-62-7

CMF C2 H2 O4



OS.CITING REF COUNT: 2

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

REFERENCE COUNT: 1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 93 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:270812 CAPLUS

DOCUMENT NUMBER: 131:41307

TITLE: A fluorometric assay for glycosyltransferase activities using sugars aminated and tagged with 7-hydroxycoumarin-3-carboxylic acid as substrates and high performance liquid chromatography

AUTHOR(S): Higai, Koji; Masuda, Daisuke; Matsuzawa, Yukinari; Satoh, Tamae; Matsumoto, Kojiro

CORPORATE SOURCE: Department of Clinical Chemistry, Faculty of Pharmaceutical Sciences, Toho University, Chiba, 274-8510, Japan

SOURCE: Biological &amp; Pharmaceutical Bulletin (1999), 22(4), 333-338

CODEN: BPBLEO; ISSN: 0918-6158

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We developed a novel fluorometric assay method for the measurement of glycosyltransferase activities using mono- and di-saccharides aminated and tagged with 7-hydroxycoumarin-3-carboxylic acid (coumarin) as substrates, N-acetylglucosamine (GlcNAc)-coumarin for  $\beta$ 1,4-galactosyltransferase from bovine milk and Gal $\beta$ 1-4GlcNAc-coumarin for  $\alpha$ 2,3- and  $\alpha$ 2,6-sialyltransferases from rat liver. Using Gal $\beta$ 1-3GlcNAc and Gal $\beta$ 1-4GlcNAc-coumarin,  $\alpha$ 1,3/4- and  $\alpha$ 1,3-fucosyltransferase activities were also determined, resp. These enzymic products liberated by the reactions of glycosyltransferases in the presence of sugar nucleotides, were separated by a normal phase or an ion-pair reversed phase HPLC with an isocratic elution and fluorescence detection. We applied this assay method to determine the glycosyltransferase activities in 8 kinds of human tumor cell lines, including the cell lines derived from hepatocytes (HuH-7, HepG2), colonic cells (Colo205, HT-29), myelocytes (HL-60, U-937), B-lymphocytes (Daudi) and T-lymphocytes (Jurkat). This assay method is accurate and easy compared with other isotopic and non-isotopic assay methods, and is sensitive enough to measure glycosyltransferase activities in cell homogenates.

IT 227296-69-7P 227296-72-2P 227296-75-5P

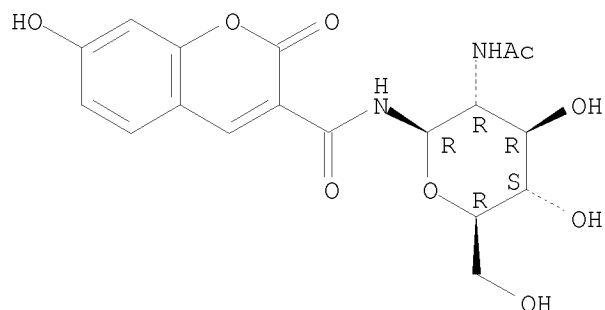
RL: ARG (Analytical reagent use); PNU (Preparation, unclassified); ANST (Analytical study); PREP (Preparation); USES (Uses)  
(fluorometric glycosyltransferase assay using  
7-hydroxycoumarin-3-carboxylic acid sugar derivs.)

RN 227296-69-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl]-7-hydroxy-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

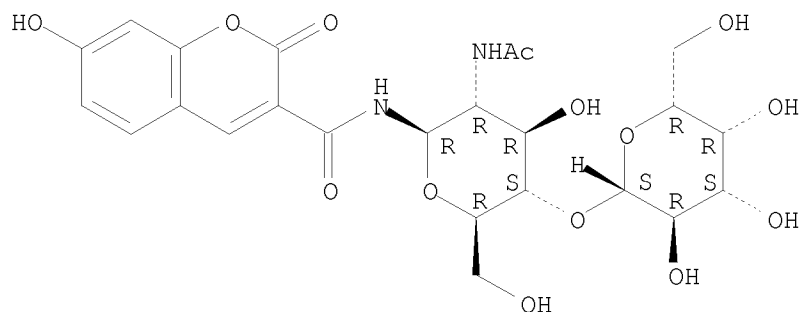
10/513699



RN 227296-72-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(acetylamino)-2-deoxy-4-O- $\beta$ -D-galactopyranosyl- $\beta$ -D-glucopyranosyl]-7-hydroxy-2-oxo- (CA INDEX NAME)

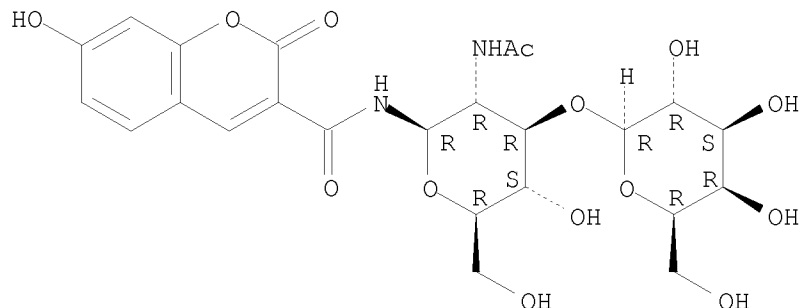
Absolute stereochemistry.



RN 227296-75-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(acetylamino)-2-deoxy-3-O- $\beta$ -D-galactopyranosyl- $\beta$ -D-glucopyranosyl]-7-hydroxy-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS

<12/04/2007>

Erich Leese

10/513699

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese



L9 ANSWER 94 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:99038 CAPLUS

DOCUMENT NUMBER: 130:320552

TITLE: Anti-inflammatory benzopyran-2-ones and their active oxygen species (aos) scavenging activity

AUTHOR(S): Bhalla, M.; Shukla, S.; Gujrati, V. R.; Saxena, A. K.; Sanger, K. C. S.; Shanker, K.

CORPORATE SOURCE: Department of Biochemistry, University of Lucknow, Lucknow, India

SOURCE: Bollettino Chimico Farmaceutico (1998), 137(10), 403-411

CODEN: BCFAAI; ISSN: 0006-6648

PUBLISHER: Societa Editoriale Farmaceutica

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Benzopyrano derivs. were synthesized and evaluated for their anti-inflammatory, ulcerogenic activities and toxicity studies. The in-vitro studies comprised of anti-proteolytic activity, lipid peroxidn. inhibitory and reducing activities against  $\alpha, \alpha$ -diphenyl- $\beta$ -picrylhydrazyl (DPPH). Two potent compds. were studied further for their inhibition of lipid peroxidn. and effect on Superoxide dismutase (SOD) activity in-vivo. These compds. were found promising in all the parameters studied, thereby signifying inter-relationship between their anti-inflammatory activity and anti-oxidant properties.

IT 156177-01-4P 223763-41-5P 223763-42-6P

223763-43-7P 223763-44-8P 223763-45-9P

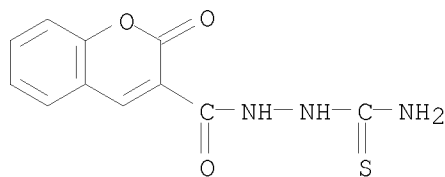
223763-46-0P 223763-47-1P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; benzopyran-2-ones synthesis and anti-inflammatory, active oxygen species scavenging, anti-proteolytic and ulcerogenic activities in vitro and in vivo)

RN 156177-01-4 CAPLUS

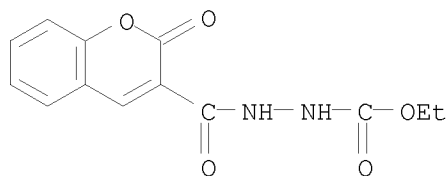
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(aminothioxomethyl)hydrazide (CA INDEX NAME)



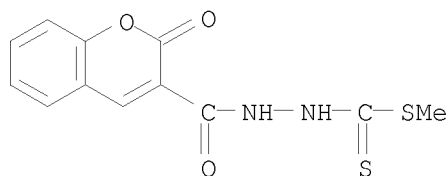
RN 223763-41-5 CAPLUS

CN Hydrazinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

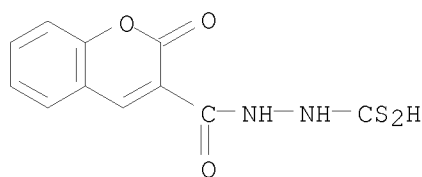
10/513699



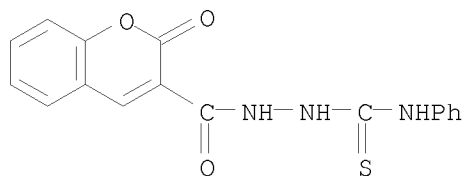
RN 223763-42-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(methylthio)thioxomethyl]hydrazide (CA INDEX NAME)



RN 223763-43-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(dithiocarboxy)hydrazide (CA  
INDEX NAME)

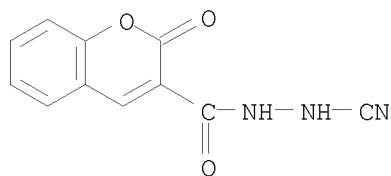


RN 223763-44-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(phenylamino)thioxomethyl]hydrazide (CA INDEX NAME)



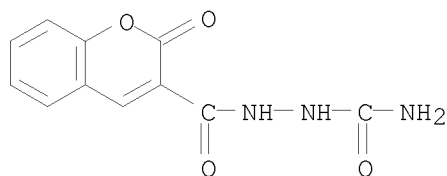
RN 223763-45-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-cyanohydrazide (CA INDEX  
NAME)

10/513699



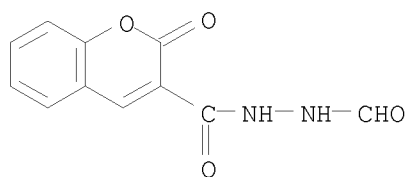
RN 223763-46-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(aminocarbonyl)hydrazide (CA INDEX NAME)



RN 223763-47-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-formylhydrazide (CA INDEX NAME)



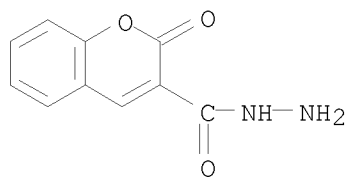
IT 1846-91-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; benzopyran-2-ones synthesis and anti-inflammatory, active oxygen species scavenging, anti-proteolytic and ulcerogenic activities in vitro and in vivo)

RN 1846-91-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)

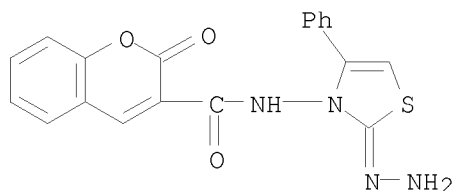


REFERENCE COUNT:

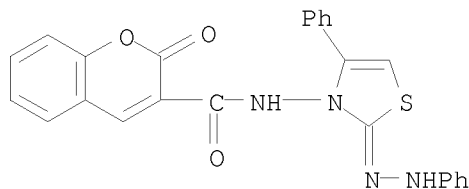
19

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 95 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1999:87104 CAPLUS  
 DOCUMENT NUMBER: 130:237512  
 TITLE: Reaction of carbon disulfide with cyanoacetic acid  
 hydrazide: novel synthesis of thiazole and  
 thiazolo[4,5-c]pyrazole  
 AUTHOR(S): Mohareb, Rafat M.; Aziz, Suzan I.; Abdel-Sayed, Nadia  
 I.; El-Banna, Ahmed H.  
 CORPORATE SOURCE: Chemistry Department, Faculty of Science, Cairo  
 University, Giza, Egypt  
 SOURCE: Journal of Chemical Research, Synopses (1999  
 ), (1), 10-11, 101-124, 126-128  
 CODEN: JRPSDC; ISSN: 0308-2342  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 130:237512  
 AB The reaction of cyanoacetic acid hydrazide with carbon disulfide in basic  
 DMF afforded a potassium thiocarbamate which underwent ready  
 heterocyclization upon its reaction with  $\alpha$ -halo ketones to give  
 thiazole derivs.  
 IT 221340-93-8P 221340-94-9P 221341-30-6P  
 221341-31-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 221340-93-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(2-hydrazinylidene-4-phenyl-3(2H)-  
 thiazolyl)-2-oxo- (CA INDEX NAME)

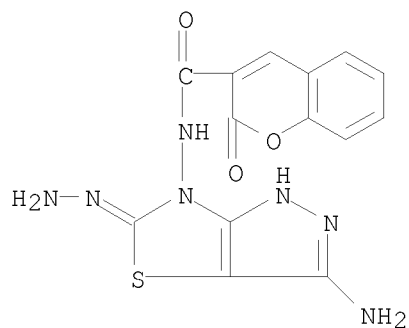


RN 221340-94-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-phenyl-2-(2-  
 phenylhydrazinylidene)-3(2H)-thiazolyl]- (CA INDEX NAME)

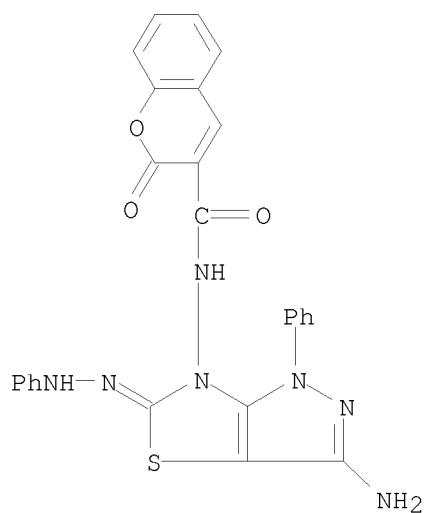


RN 221341-30-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(3-amino-5-hydrazinylidene-1,5-dihydro-6H-  
 pyrazolo[3,4-d]thiazol-6-yl)-2-oxo- (CA INDEX NAME)

10/513699

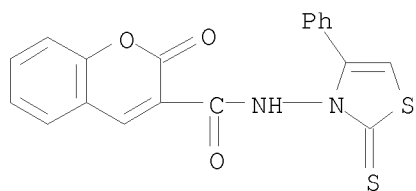


RN 221341-31-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[3-amino-1,5-dihydro-1-phenyl-5-(2-phenylhydrazinylidene)-6H-pyrazolo[3,4-d]thiazol-6-yl]-2-oxo- (CA INDEX NAME)



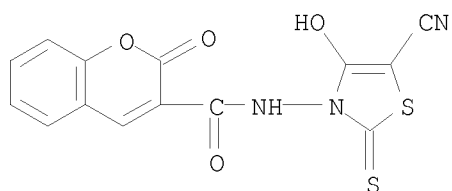
IT 221340-90-5P 221341-22-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of thiazolopyrazole or thiazole derivs.)  
RN 221340-90-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(4-phenyl-2-thioxo-3(2H)-thiazolyl)- (CA INDEX NAME)

10/513699



RN 221341-22-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(5-cyano-4-hydroxy-2-thioxo-3(2H)-thiazolyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 5

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 21

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 96 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:206 CAPLUS

DOCUMENT NUMBER: 130:191387

TITLE: Conjugation of Dipeptide to Fluorescent Dyes Enhances Its Affinity for a Dipeptide Transporter (PEPT1) in Human Intestinal Caco-2 Cells

AUTHOR(S): Abe, Hiroshi; Satoh, Momoko; Miyauchi, Seiji; Shuto, Satoshi; Matsuda, Akira; Kamo, Naoki

CORPORATE SOURCE: Laboratory of Biophysical Chemistry and Medicinal Chemistry Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, 060-0812, Japan

SOURCE: Bioconjugate Chemistry (1999), 10(1), 24-31

CODEN: BCCHE5; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Dipeptide transporters in small intestine have a very wide substrate specificity, so that the transporter sometimes serves as a carrier for peptide-like compds. We have synthesized dipeptide analogs conjugated at an  $\epsilon$ -amino group of Lys in Val-Lys or Lys-Sar with fluorescent compds. such as fluorescein isothiocyanate and coumarin-3-carboxylic acid. Uptakes of these peptide analogs were examined by measuring intracellular accumulations into monolayers of the human intestinal epithelial cell line Caco-2 expressing the dipeptide transporter PEPT1. Kinetic anal. and effects of addition either of uncoupler (protonophore) or by Gly-Sar, one of the good substrates of PEPT1, revealed that fluorescent dipeptides were taken up by passive diffusion. In contrast, these analogs remarkably inhibited the Gly-Sar uptake by Caco-2 cells. Among the fluorescent analogs synthesized in this paper, Val-Lys(Flu) was the most potent competitive inhibitor against the Gly-Sar uptake with an inhibition constant of 5  $\mu$ M. This value is the smallest among those ever reported: Val-Lys(Flu) has the highest affinity for PEPT1 among chems. ever reported. The importance of the hydrophobic part of the substrate was pointed out.

IT 220757-66-4P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

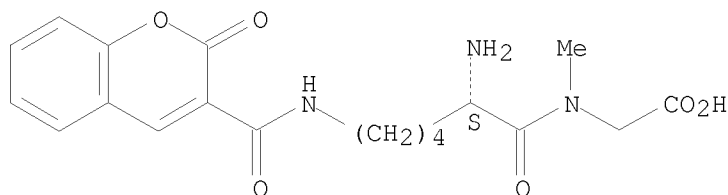
(Lys-Sar conjugated to coumarin-3-carboxylic acid; conjugation of dipeptide to fluorescent dyes enhances affinity for a dipeptide transporter (PEPT1) in human intestinal caco-2 cells)

RN 220757-66-4 CAPLUS

CN Glycine, N6-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-lysyl-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

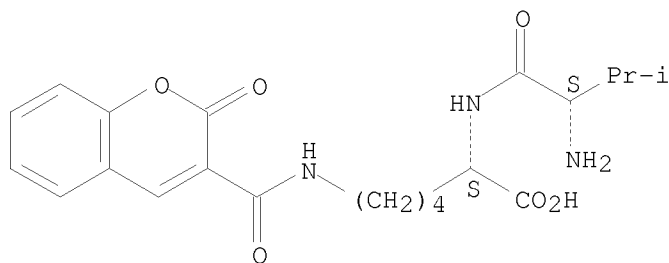
10/513699



● HCl

IT 220757-64-2P  
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
BIOL (Biological study); PREP (Preparation)  
(Val-Lys conjugated to coumarin-3-carboxylic acid; conjugation of  
dipeptide to fluorescent dyes enhances affinity for a dipeptide  
transporter (PEPT1) in human intestinal caco-2 cells)  
RN 220757-64-2 CAPLUS  
CN L-Lysine, L-valyl-N6-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-,  
monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



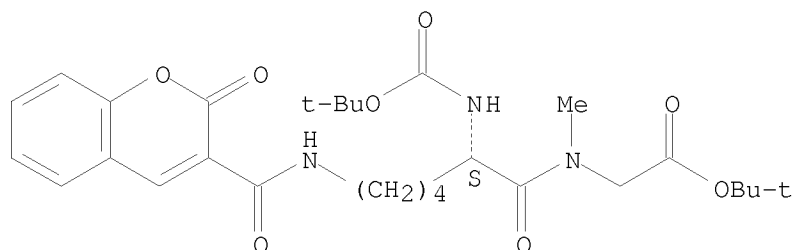
● HCl

IT 220757-65-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(deprotection Boc and t-Bu; conjugation of dipeptide to fluorescent  
dyes enhances affinity for a dipeptide transporter (PEPT1) in human  
intestinal caco-2 cells)  
RN 220757-65-3 CAPLUS  
CN Glycine, N2-[(1,1-dimethylethoxy)carbonyl]-N6-[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]-L-lysyl-N-methyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.



10/513699



IT 220757-63-1P

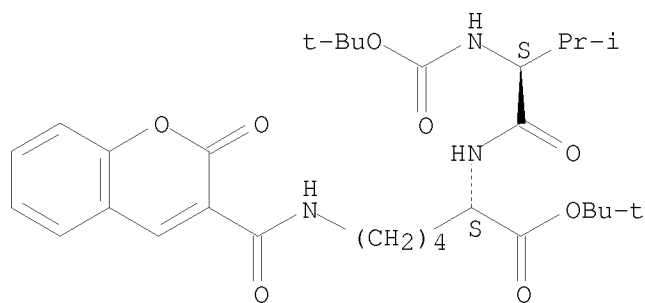
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(deprotection, Boc and t-Bu; conjugation of dipeptide to fluorescent dyes enhances affinity for a dipeptide transporter (PEPT1) in human intestinal caco-2 cells)

RN 220757-63-1 CAPLUS

CN L-Lysine, N-[(1,1-dimethylethoxy)carbonyl]-L-valyl-N6-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 97 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:806650 CAPLUS

DOCUMENT NUMBER: 130:52331

TITLE: Preparation of coumarin derivatives as protease inhibitors

INVENTOR(S): Reboud-Ravaux, Michele; Pochet, Lionel; Doucet, Caroline; Pirotte, Bernard; Boggetto, Nicole; Delarge, Jacques

PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique, Fr.

SOURCE: PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

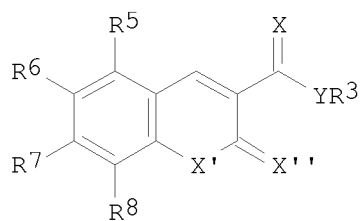
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 9855472	A1	19981210	WO 1998-FR1087	19980529 <--
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2763944	A1	19981204	FR 1997-6814	19970603 <--
FR 2763944	B1	20001215		
EP 988298	A1	20000329	EP 1998-928394	19980529 <--
R: DE, FR, GB, IT				
JP 2002503241	T	20020129	JP 1999-501707	19980529 <--
US 6355658	B1	20020312	US 2000-445177	20000201 <--
PRIORITY APPLN. INFO.:			FR 1997-6814	A 19970603
			WO 1998-FR1087	W 19980529

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 130:52331; MARPAT 130:52331

GI



AB The title compds. I [X, X', X'' = O, S; Y O, S, NH, NHS; R3 = cycloalkyl, aryl, etc.; R5, R6, R7, R8 = H, halo, alkyl, etc.], inhibitors of human elastase, bovine  $\alpha$ -chymotrypsin, human thrombin, and bovine trypsin, were prepared E.g., 5-chloro-3-pyridyl

6-dimethylacetoxymethyl-2-oxo-2H-1-benzopyran-3-carboxylate was prepared

IT 217081-85-1P 217081-86-2P 217081-87-3P

217081-91-9P

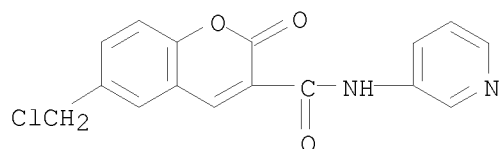
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

10/513699

BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of coumarin derivs. as protease inhibitors)

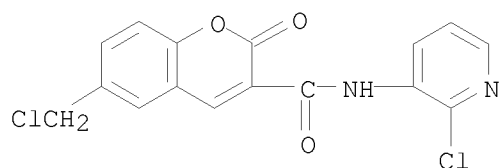
RN 217081-85-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-3-pyridinyl- (CA INDEX NAME)



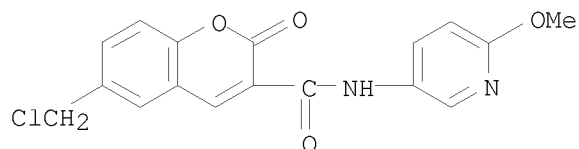
RN 217081-86-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-(2-chloro-3-pyridinyl)-2-oxo- (CA INDEX NAME)



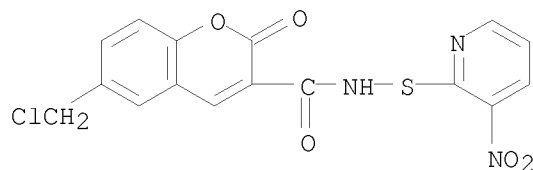
RN 217081-87-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-(6-methoxy-3-pyridinyl)-2-oxo- (CA INDEX NAME)



RN 217081-91-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-[(3-nitro-2-pyridinyl)thio]-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

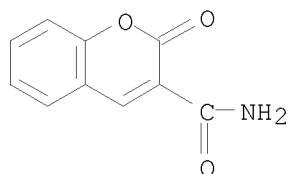
10/513699

<12/04/2007>

Erich Leese

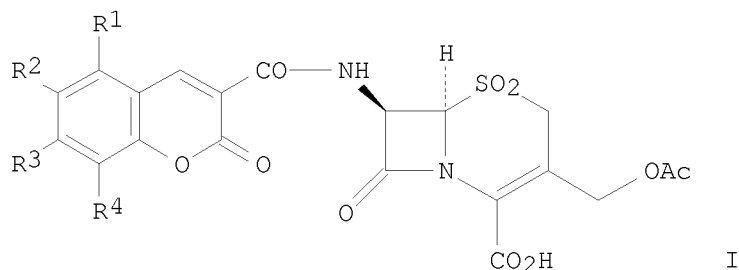
10/513699

L9 ANSWER 98 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1998:775235 CAPLUS  
DOCUMENT NUMBER: 130:110133  
TITLE: A facile synthesis of 3-substituted  
2H-[1]benzopyran-2-ones  
AUTHOR(S): Srinivas, K.; Krishna, K. L.; Sivaprasad, A.; Rao, P.  
Shanthan  
CORPORATE SOURCE: Organic Chemistry Division, Institute of Chemical  
Technology, Hyderabad, 500 007, India  
SOURCE: Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (1998  
, 37B(9), 936-938  
CODEN: IJSBDB; ISSN: 0376-4699  
PUBLISHER: National Institute of Science Communication, CSIR  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 130:110133  
AB Several title compds. were prepared in a single step from salicylaldehyde  
and malonate derivs., catalyzed by anhydrous zinc chloride.  
IT 1846-78-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 99 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:634395 CAPLUS  
 DOCUMENT NUMBER: 129:316061  
 ORIGINAL REFERENCE NO.: 129:64499a,64502a  
 TITLE: Synthesis and antimicrobial activity of coumarin  
 7-substituted cephalosporins and sulfones  
 AUTHOR(S): Bonsignore, Leonardo; Cottiglia, Filippo; Elkhaili,  
 H.; Jehl, Francoise; Lavagna, Silvio M.; Loy,  
 Giuseppe; Manna, Fedele; Monteil, Henry; Pompei,  
 Davide; Secci, Daniela  
 CORPORATE SOURCE: Dipartimento Farmaco Chimico Tecnologico, Universita  
 di Cagliari, Cagliari, 09124, Italy  
 SOURCE: Farmaco (1998), 53(6), 425-430  
 CODEN: FRMCE8; ISSN: 0014-827X  
 PUBLISHER: Elsevier Science S.A.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Some coumarin 7-substituted cephalosporins (I) (R1, R3 = H, OMe; R2, R4 = Br, Cl, H) and related sulfones were prepared and an antimicrobial assay was performed. The min. inhibitory concentration (MIC) and min. bactericidal concentration

(MBC) carried out on cephalosporins showed a potential activity of some of the synthesized compds. against Gram-pos. microorganisms. The tests performed on the corresponding sulfones showed no significant activity, neither as antimicrobial agents nor as inhibitors of  $\beta$ -lactamase. An association of sulfone I (R1,R2,R3,R4 = H) with ampicillin was observed to inhibit Gram-pos. microorganisms with a lower MIC than for ampicillin alone.

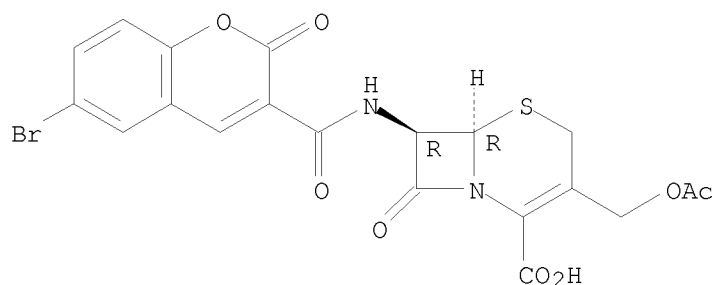
IT 102330-32-5P 102330-33-6P 108793-58-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antimicrobial activity of coumarin 7-substituted cephalosporins and sulfones)

RN 102330-32-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

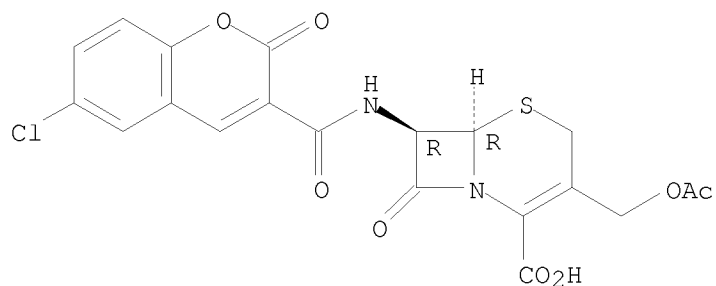
Absolute stereochemistry.

10/513699



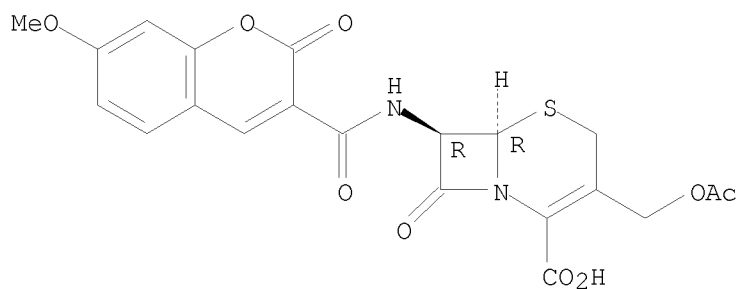
RN 102330-33-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 108793-58-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

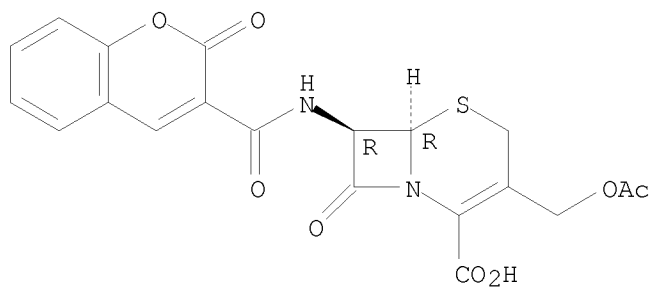


IT 102330-31-4P 214833-58-6P 214833-71-3P  
214833-73-5P 214833-75-7P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(synthesis and antimicrobial activity of coumarin 7-substituted cephalosporins and sulfones)

10/513699

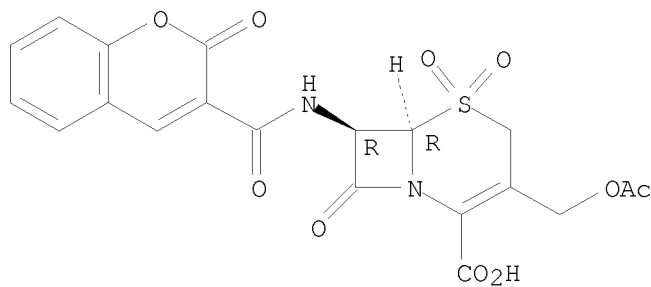
RN 102330-31-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



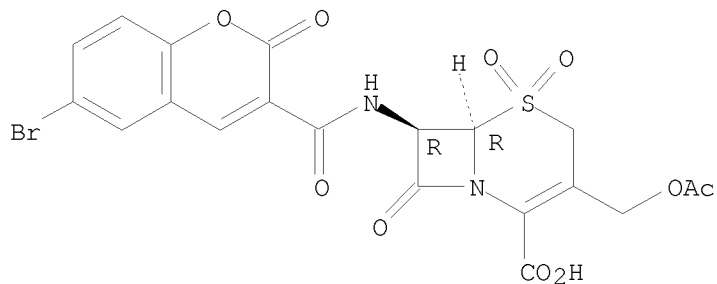
RN 214833-58-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 5,5-dioxide, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 214833-71-3 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, 5,5-dioxide, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

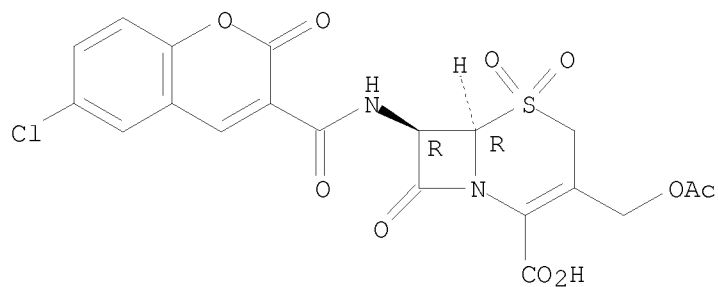




10/513699

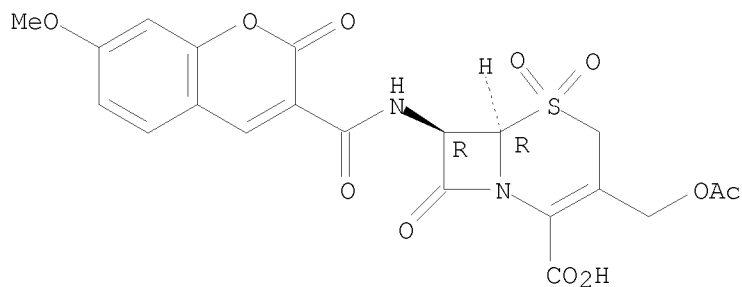
RN 214833-73-5 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-chloro-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-8-oxo-, 5,5-dioxide, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 214833-75-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-8-oxo-, 5,5-dioxide, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS  
RECORD (12 CITINGS)  
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 100 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:548547 CAPLUS  
 DOCUMENT NUMBER: 129:180147  
 ORIGINAL REFERENCE NO.: 129:36505a,36508a  
 TITLE: Compounds and compositions for delivering active agents  
 INVENTOR(S): Leone-Bay, Andrea; et al.  
 PATENT ASSIGNEE(S): Emisphere Technologies, Inc., USA  
 SOURCE: PCT Int. Appl., 147 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 30  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9834632	A1	19980813	WO 1998-US2619	19980206 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5773647	A	19980630	US 1997-796337	19970207 <--
US 5776888	A	19980707	US 1997-796338	19970207 <--
US 5804688	A	19980908	US 1997-796339	19970207 <--
US 5876710	A	19990302	US 1997-796335	19970207 <--
US 5879681	A	19990309	US 1997-796334	19970207 <--
US 5939381	A	19990817	US 1997-796340	19970207 <--
US 5990166	A	19991123	US 1997-797820	19970207 <--
US 6051561	A	20000418	US 1997-797813	19970207 <--
US 6060513	A	20000509	US 1997-797817	19970207 <--
US 6090958	A	20000718	US 1997-797816	19970207 <--
US 6313088	B1	20011106	US 1997-797100	19970207 <--
US 6358504	B1	20020319	US 1997-796336	19970207 <--
CA 2279331	A1	19980813	CA 1998-2279331	19980206 <--
AU 9862756	A	19980826	AU 1998-62756	19980206 <--
AU 738735	B2	20010927		
EP 1015008	A1	20000705	EP 1998-905042	19980206 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001513080	T	20010828	JP 1998-535034	19980206 <--
NZ 337131	A	20010831	NZ 1998-337131	19980206 <--
MX 9907290	A	20000531	MX 1999-7290	19990806 <--
AU 771024	B2	20040311	AU 2000-72261	20001214
AU 771434	B2	20040325	AU 2000-72260	20001214
US 20020119910	A1	20020829	US 2000-746548	20001219 <--
US 20030008900	A1	20030109	US 2001-1731	20011031
US 6525020	B2	20030225		
US 20030235612	A1	20031225	US 2003-373582	20030224
US 7125910	B2	20061024		
US 20040022856	A1	20040205	US 2003-395685	20030324
US 7071214	B2	20060704		
AU 2004202745	A1	20040923	AU 2004-202745	20040623

10/513699

US 20060166859	A1	20060727	US 2006-354045	20060213
US 7553872	B2	20090630		
US 20090324540	A1	20091231	US 2009-482320	20090610
PRIORITY APPLN. INFO.:			US 1997-796334	A1 19970207
			US 1997-796335	A1 19970207
			US 1997-796336	A1 19970207
			US 1997-796337	A1 19970207
			US 1997-796338	A1 19970207
			US 1997-796339	A1 19970207
			US 1997-796340	A1 19970207
			US 1997-796341	A1 19970207
			US 1997-797100	A1 19970207
			US 1997-797813	A1 19970207
			US 1997-797816	A1 19970207
			US 1997-797817	A1 19970207
			US 1997-797820	A1 19970207
			US 1996-17902P	P 19960329
			WO 1997-US5128	A2 19970318
			AU 1998-62756	A3 19980206
			EP 1999-117292	A3 19980206
			WO 1998-US2619	W 19980206
			AU 2000-72260	A3 20001214
			US 2000-746548	B1 20001219
			US 2001-1731	A1 20011031
			US 2003-395685	A3 20030324
			US 2006-354045	A3 20060213

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

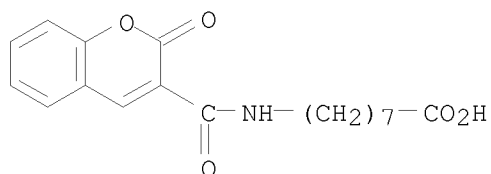
AB Carrier compds. and compns. which are useful in the delivery of active agents are provided. The carrier compound can be an amino acid derivative, and the active agent can be a peptide, mucopolysaccharide, carbohydrate, or lipid. Methods of administration, including oral administration, and preparation are provided as well. For example, an oral solution contained parathyroid hormone 100 µg, 4-[4-(phenoxyacetyl)aminophenyl]butyric acid (as carrier) 400 mg, and water 1L.

IT 204852-90-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(amino acid derivs. as carriers for oral delivery of biol. active agents)

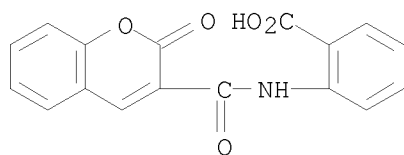
RN 204852-90-4 CAPLUS

CN Octanoic acid, 8-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)  
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 101 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:465414 CAPLUS  
 DOCUMENT NUMBER: 129:202830  
 ORIGINAL REFERENCE NO.: 129:41207a, 41210a  
 TITLE: Rearrangements of  
 2-imino-2H-1-benzopyran-3-carboxamides under action of  
 anthranilic acid as N-nucleophile  
 AUTHOR(S): Bilokin, Yaroslav V.; Kovalenko, Sergey N.; Bylov,  
 Igor E.; Chernykh, Valentin P.  
 CORPORATE SOURCE: Dep. Organic Chemistry, Ukrainian Academy Pharmacy,  
 Kharkov, 310002, Ukraine  
 SOURCE: Heterocyclic Communications (1998), 4(3),  
 257-260  
 CODEN: HCOMEX; ISSN: 0793-0283  
 PUBLISHER: Freund Publishing House Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The rearrangement of 2-imino-2H-1-benzopyran-3-carboxamides under action  
 of anthranilic acid as N-nucleophile was revealed. Starting from readily  
 available 2-imino-2H-1-benzopyran-3-carboxamides and anthranilic acid and  
 depending on reaction conditions, 2-(2-oxo-2H-1-benzopyran-2-yl)-3H-  
 quinazolin-4-ones and 2-oxo-2H-1-benzopyran-3-(N-2-  
 carboxyphenyl)carboxamides were prepared via the rearrangement. Possible  
 mechanisms of these rearrangement were discussed.  
 IT 73877-78-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (rearrangement of (imino)benzopyrancarboxamides in presence of  
 anthranilic acid)  
 RN 73877-78-8 CAPLUS  
 CN Benzoic acid, 2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX  
 NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS  
 RECORD (12 CITINGS)  
 REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 102 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:457247 CAPLUS  
 DOCUMENT NUMBER: 129:113532  
 ORIGINAL REFERENCE NO.: 129:23203a,23206a  
 TITLE: Compounds and compositions for delivering active agents  
 INVENTOR(S): Leone-Bay, Andrea; Wang, Eric; Sarubbi, Donald J.; Leipold, Harry  
 PATENT ASSIGNEE(S): Emisphere Technologies, Inc., USA  
 SOURCE: U.S., 34 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 30  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5776888	A	19980707	US 1997-796338	19970207 <--
CA 2279331	A1	19980813	CA 1998-2279331	19980206 <--
CA 2319672	A1	19980813	CA 1998-2319672	19980206 <--
CA 2319680	A1	19980813	CA 1998-2319680	19980206 <--
WO 9834632	A1	19980813	WO 1998-US2619	19980206 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9862756	A	19980826	AU 1998-62756	19980206 <--
AU 738735	B2	20010927		
EP 993831	A2	20000419	EP 1999-117292	19980206 <--
EP 993831	A3	20010502		
EP 993831	B1	20080109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1015008	A1	20000705	EP 1998-905042	19980206 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1093819	A2	20010425	EP 2000-122704	19980206 <--
EP 1093819	A3	20030514		
EP 1093819	B1	20060503		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001513080	T	20010828	JP 1998-535034	19980206 <--
NZ 337131	A	20010831	NZ 1998-337131	19980206 <--
AT 324907	T	20060615	AT 2000-122704	19980206
PT 1093819	E	20060929	PT 2000-122704	19980206
ES 2263428	T3	20061216	ES 2000-122704	19980206
AT 383169	T	20080115	AT 1999-117292	19980206
PT 993831	E	20080212	PT 1999-117292	19980206
ES 2297909	T3	20080501	ES 1999-117292	19980206
MX 9907290	A	20000531	MX 1999-7290	19990806 <--
NZ 507275	A	20011130	NZ 2000-507275	20001003 <--
NZ 507276	A	20020201	NZ 2000-507276	20001003 <--

10/513699

JP 2001131090	A	20010515	JP 2000-311231	20001011 <--
JP 3964613	B2	20070822		
JP 2001139494	A	20010522	JP 2000-311230	20001011 <--
JP 4012679	B2	20071121		
AU 771024	B2	20040311	AU 2000-72261	20001214
AU 771434	B2	20040325	AU 2000-72260	20001214
HK 1037132	A1	20061103	HK 2001-107390	20011023
AU 2004202745	A1	20040923	AU 2004-202745	20040623
JP 2010018636	A	20100128	JP 2009-246865	20091027
PRIORITY APPLN. INFO.:			US 1997-796334	A 19970207

US 1997-796335	A 19970207
US 1997-796336	A 19970207
US 1997-796337	A 19970207
US 1997-796338	A 19970207
US 1997-796339	A 19970207
US 1997-796340	A 19970207
US 1997-796341	A 19970207
US 1997-797100	A 19970207
US 1997-797813	A 19970207
US 1997-797816	A 19970207
US 1997-797817	A 19970207
US 1997-797820	A 19970207
AU 1998-62756	A3 19980206
CA 1998-2279331	A3 19980206
EP 1998-905042	A3 19980206
EP 1999-117292	A3 19980206
JP 1998-535034	A3 19980206
NZ 1998-337131	A1 19980206
WO 1998-US2619	W 19980206
AU 2000-72260	A3 20001214

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Carrier compds. and compns. which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well. Standard methods of preparation are mentioned for the 193 carrier compds.

listed, which primarily are N-(fatty acid) benzamide derivs. Examples are listed for the delivery of parathyroid hormone, recombinant human growth hormone, interferon and the evaluation of heparin in rats.

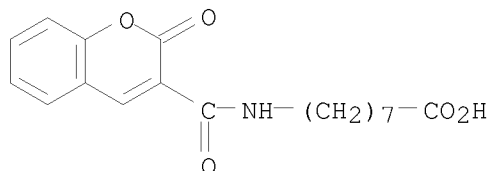
IT 204852-90-4P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzamide fatty acid derivs. for delivering active agents)

RN 204852-90-4 CAPLUS

CN Octanoic acid, 8-[[ (2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

<12/04/2007>

Erich Leese

10/513699

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 103 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:430107 CAPLUS  
 DOCUMENT NUMBER: 129:113525  
 ORIGINAL REFERENCE NO.: 129:23203a,23206a  
 TITLE: Compounds and compositions for delivering active agents  
 INVENTOR(S): Leone-Bay, Andrea; Wang, Eric; Sarubbi, Donald J.; Leipold, Harry  
 PATENT ASSIGNEE(S): Emisphere Technologies, Inc., USA  
 SOURCE: U.S., 35 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 30  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5773647	A	19980630	US 1997-796337	19970207 <--
CA 2279331	A1	19980813	CA 1998-2279331	19980206 <--
CA 2319672	A1	19980813	CA 1998-2319672	19980206 <--
CA 2319680	A1	19980813	CA 1998-2319680	19980206 <--
WO 9834632	A1	19980813	WO 1998-US2619	19980206 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9862756	A	19980826	AU 1998-62756	19980206 <--
AU 738735	B2	20010927		
EP 993831	A2	20000419	EP 1999-117292	19980206 <--
EP 993831	A3	20010502		
EP 993831	B1	20080109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1015008	A1	20000705	EP 1998-905042	19980206 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1093819	A2	20010425	EP 2000-122704	19980206 <--
EP 1093819	A3	20030514		
EP 1093819	B1	20060503		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001513080	T	20010828	JP 1998-535034	19980206 <--
NZ 337131	A	20010831	NZ 1998-337131	19980206 <--
AT 324907	T	20060615	AT 2000-122704	19980206
PT 1093819	E	20060929	PT 2000-122704	19980206
ES 2263428	T3	20061216	ES 2000-122704	19980206
AT 383169	T	20080115	AT 1999-117292	19980206
PT 993831	E	20080212	PT 1999-117292	19980206
ES 2297909	T3	20080501	ES 1999-117292	19980206
MX 9907290	A	20000531	MX 1999-7290	19990806 <--
NZ 507275	A	20011130	NZ 2000-507275	20001003 <--
NZ 507276	A	20020201	NZ 2000-507276	20001003 <--



10/513699

JP 2001131090	A	20010515	JP 2000-311231	20001011 <--
JP 3964613	B2	20070822		
JP 2001139494	A	20010522	JP 2000-311230	20001011 <--
JP 4012679	B2	20071121		
AU 771024	B2	20040311	AU 2000-72261	20001214
AU 771434	B2	20040325	AU 2000-72260	20001214
HK 1037132	A1	20061103	HK 2001-107390	20011023
AU 2004202745	A1	20040923	AU 2004-202745	20040623
JP 2010018636	A	20100128	JP 2009-246865	20091027
PRIORITY APPLN. INFO.:			US 1997-796334	A 19970207

US 1997-796335	A	19970207
US 1997-796336	A	19970207
US 1997-796337	A	19970207
US 1997-796338	A	19970207
US 1997-796339	A	19970207
US 1997-796340	A	19970207
US 1997-796341	A	19970207
US 1997-797100	A	19970207
US 1997-797813	A	19970207
US 1997-797816	A	19970207
US 1997-797817	A	19970207
US 1997-797820	A	19970207
AU 1998-62756	A3	19980206
CA 1998-2279331	A3	19980206
EP 1998-905042	A3	19980206
EP 1999-117292	A3	19980206
JP 1998-535034	A3	19980206
NZ 1998-337131	A1	19980206
WO 1998-US2619	W	19980206
AU 2000-72260	A3	20001214

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

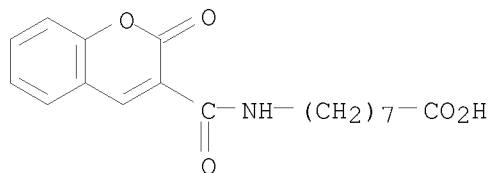
AB Carrier compds. and compns. therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well. Standard methods of preparation are mentioned for the 193 carrier compds. listed, which primarily are N-(fatty acid) benzamide derivs. Examples are listed for the delivery of parathyroid hormone, recombinant human growth hormone, interferon and the evaluation of heparin in rats.

IT 204852-90-4P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of benzamide fatty acids for delivering active agents)

RN 204852-90-4 CAPLUS

CN Octanoic acid, 8-[[ (2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

<12/04/2007>

Erich Leese

10/513699

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 104 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1998:430040 CAPLUS  
DOCUMENT NUMBER: 129:92249  
ORIGINAL REFERENCE NO.: 129:18935a,18938a  
TITLE: Assay for glutathione transferase using  
polyhaloaryl-substituted reporter molecules  
INVENTOR(S): Diwu, Zhenjun; Haugland, Richard P.  
PATENT ASSIGNEE(S): Molecule Probes, Inc., USA  
SOURCE: U.S., 34 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5773236	A	19980630	US 1997-845301	19970425 <--
PRIORITY APPLN. INFO.:			US 1997-845301	19970425

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 129:92249

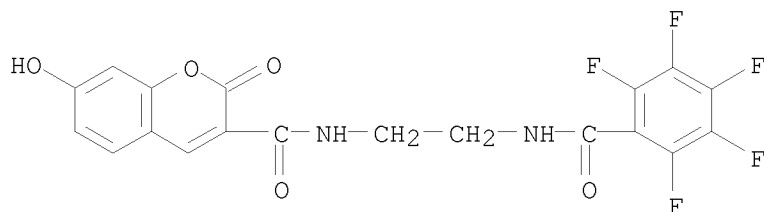
AB The subject invention describes compds. containing a polyhalogenated aryl moiety. The compds. of the invention are particularly useful for the assay of a variety of enzymes, including intracellular enzymes. The subject invention also describes assays for glutathione and/or glutathione transferase enzymes. Selected compds. of the invention are particularly useful for improving the retention of fluorescent products of enzyme metabolism in cells.

IT 209540-99-8P 209541-01-5P 209541-03-7P  
209541-06-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(assay for glutathione transferase using polyhaloaryl-substituted reporter mols.)

RN 209540-99-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-2-oxo-N-[2-[(2,3,4,5,6-pentafluorobenzoyl)amino]ethyl]- (CA INDEX NAME)

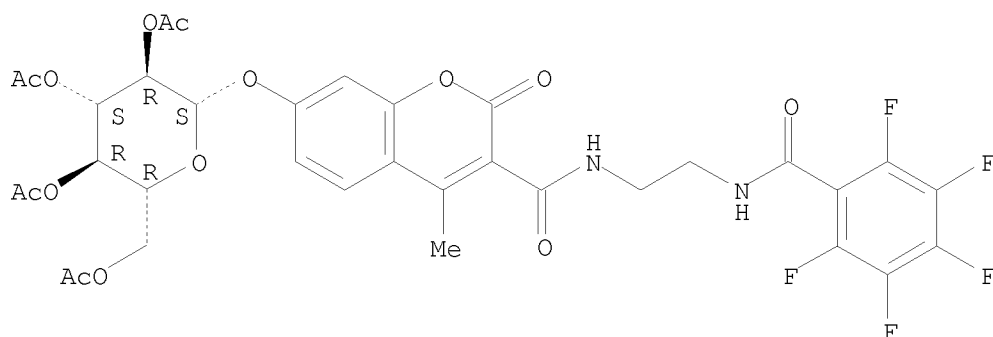


RN 209541-01-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-methyl-2-oxo-N-[2-[(pentafluorobenzoyl)amino]ethyl]-7-[(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

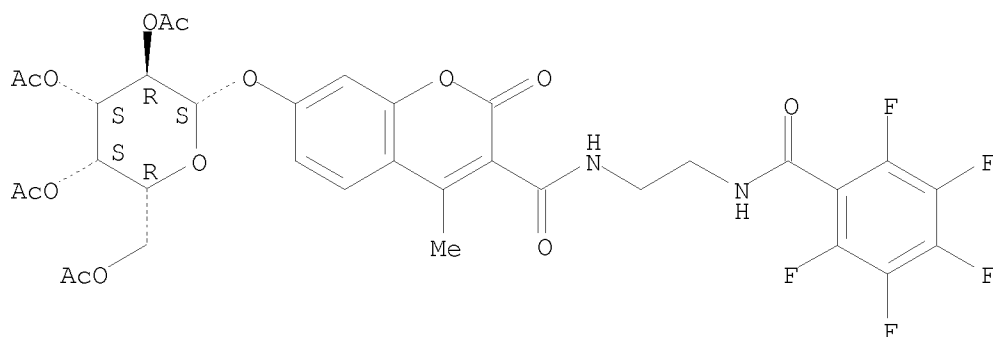
10/513699



RN 209541-03-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-methyl-2-oxo-N-[2-[(pentafluorobenzoyl)amino]ethyl]-7-[(2,3,4,6-tetra-O-acetyl- $\beta$ -D-galactopyranosyl)oxy]- (9CI) (CA INDEX NAME)

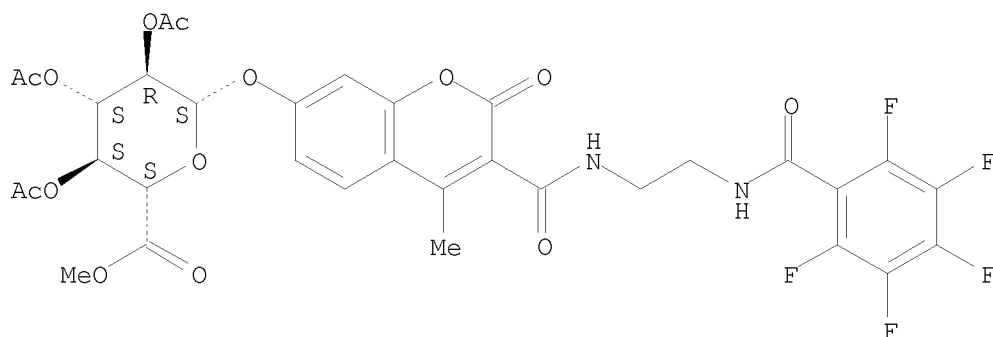
Absolute stereochemistry.



RN 209541-06-0 CAPLUS

CN  $\beta$ -D-Glucopyranosiduronic acid, 4-methyl-2-oxo-3-[[[2-[(pentafluorobenzoyl)amino]ethyl]amino]carbonyl]-2H-1-benzopyran-7-yl, methyl ester, 2,3,4-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

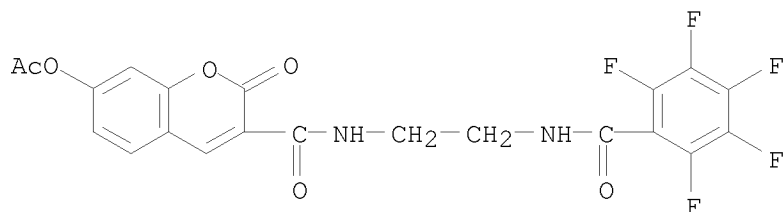


<12/04/2007>

Erich Leese

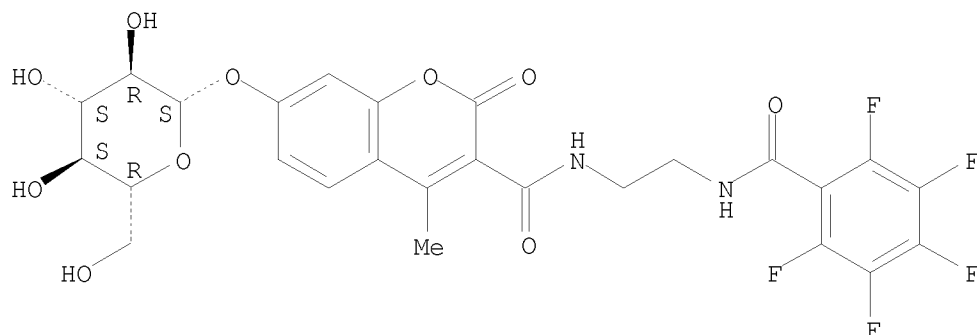
10/513699

IT 209541-00-4P 209541-02-6P 209541-05-9P  
209541-07-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(assay for glutathione transferase using polyhaloaryl-substituted  
reporter mols.)  
RN 209541-00-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-(acetyloxy)-2-oxo-N-[2-[(2,3,4,5,6-  
pentafluorobenzoyl)amino]ethyl]- (CA INDEX NAME)



RN 209541-02-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-glucopyranosyloxy)-4-methyl-2-  
oxo-N-[2-[(pentafluorobenzoyl)amino]ethyl]- (9CI) (CA INDEX NAME)

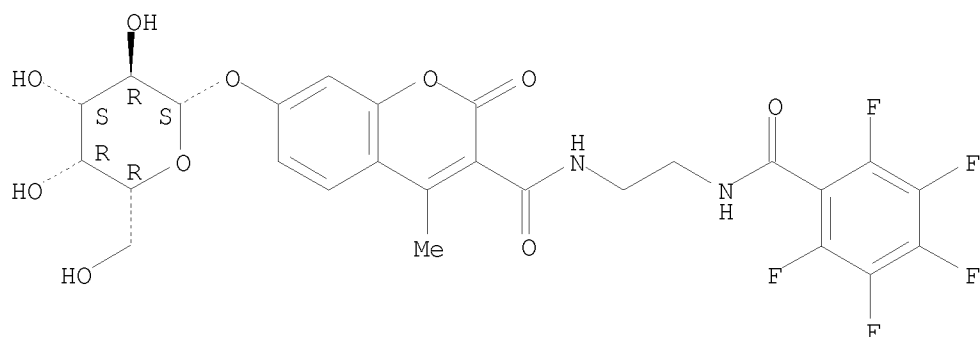
Absolute stereochemistry.



RN 209541-05-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-4-methyl-2-  
oxo-N-[2-[(pentafluorobenzoyl)amino]ethyl]- (9CI) (CA INDEX NAME)

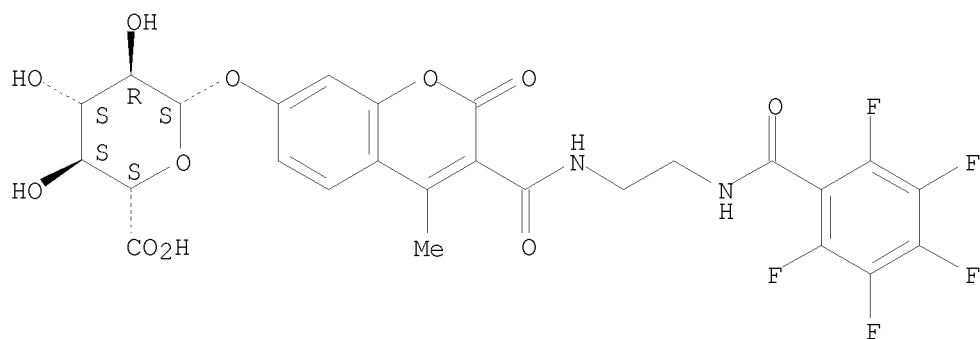
Absolute stereochemistry.

10/513699



RN 209541-07-1 CAPLUS  
CN  $\beta$ -D-Glucopyranosiduronic acid,  
4-methyl-2-oxo-3-[[[2-[(pentafluorobenzoyl)amino]ethyl]amino]carbonyl]-2H-  
1-benzopyran-7-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)  
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 105 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:169730 CAPLUS

DOCUMENT NUMBER: 128:248408

ORIGINAL REFERENCE NO.: 128:49093a, 49096a

TITLE: Synthesis and Evaluation of Compounds That Facilitate the Gastrointestinal Absorption of Heparin

AUTHOR(S): Leone-Bay, Andrea; Paton, Duncan R.; Freeman, John; Lercara, Christine; O'Toole, Doris; Gschneidner, David; Wang, Eric; Harris, Elizabeth; Rosado, Connie; Rivera, Theresa; DeVincent, Aldonna; Tai, Monica; Mercogliano, Frank; Agarwal, Rajesh; Leipold, Harry; Baughman, Robert A.

CORPORATE SOURCE: Emisphere Technologies Inc., Hawthorne, NY, 10532, USA

SOURCE: Journal of Medicinal Chemistry (1998), 41(7), 1163-1171

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A family of aliphatic acid amides (delivery agents) that promote the gastrointestinal absorption of USP heparin in rats and primates has been discovered. The delivery agents in combination with heparin were administered either orally or intracolonicly in an aqueous propylene glycol solution and caused dramatic increases in both plasma heparin concns. (anti-Factor Xa) and clotting times (APTT). Using one of the most effective delivery agents in this series, an estimated relative bioavailability of 8% can be achieved following oral administration to cynomolgus monkeys. To establish a correlation between the in vivo data and an in vitro parameter, immobilized artificial membrane (IAM) chromatog. was performed. Log relative k' values were correlated to the efficiency of oral heparin delivery.

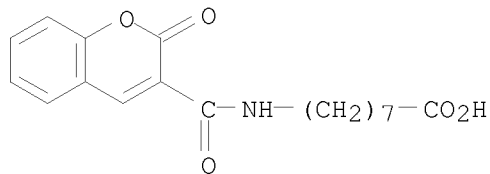
IT 204852-90-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis and evaluation of compds. that facilitate the gastrointestinal absorption of heparin)

RN 204852-90-4 CAPLUS

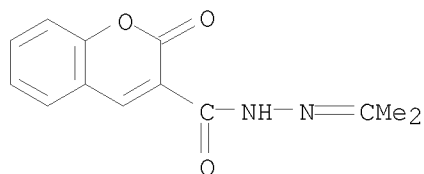
CN Octanoic acid, 8-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 43 THERE ARE 43 CAPLUS RECORDS THAT CITE THIS RECORD (44 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 106 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:129410 CAPLUS  
 DOCUMENT NUMBER: 128:217206  
 ORIGINAL REFERENCE NO.: 128:43031a,43034a  
 TITLE: Unusual one-pot "substitution" of 3-acetyl and 3-ethoxycarbonyl functions for cyano group in coumarins  
 AUTHOR(S): Traven, Valery F.; Dimitrova, Violeta D.; Sedov, Andrey L.; Rozhkov, Roman V.; Nemeryuk, Michael P.; Salem, Maduar R.; Carberry, Edward A.  
 CORPORATE SOURCE: Department of Organic Chemistry, D. Mendeleev University of Chemical Technology of Russia, Moscow, 125047, Russia  
 SOURCE: Heterocyclic Communications (1998), 4(1), 33-37  
 CODEN: HCOMEX; ISSN: 0793-0283  
 PUBLISHER: Freund Publishing House Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Interaction of 3-ethoxycarbonyl and 3-acetylcoumarins with cyanoacetylhydrazide or its N-acetyl and N-ethoxycarbonyl derivs. in the Michael reaction conditions results in corresponding 3-cyanocoumarins. Apparently the reaction undergoes through pyrone ring opening and recyclization steps. Possible mechanism of the "substitution" is discussed.  
 IT 204185-63-7  
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)  
 (one-pot "substitution" of 3-acetyl and 3-ethoxycarbonyl functions for cyano group in coumarins)  
 RN 204185-63-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(1-methylethylidene)hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)  
 REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



10/513699

L9 ANSWER 107 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:30000 CAPLUS

DOCUMENT NUMBER: 128:176632

ORIGINAL REFERENCE NO.: 128:34723a,34726a

TITLE: Quantitation of transcription and clonal selection of single living cells with  $\beta$ -lactamase as reporter

AUTHOR(S): Zlokarnik, Gregor; Negulescu, Paul A.; Knapp, Thomas E.; Mere, Lora; Burres, Neal; Feng, Luxin; Whitney, Michael; Roemer, Klaus; Tsien, Roger Y.

CORPORATE SOURCE: San Diego, CA, 92121, USA

SOURCE: Science (Washington, D. C.) (1998), 279(5347), 84-88

CODEN: SCIEAS; ISSN: 0036-8075

PUBLISHER: American Association for the Advancement of Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Gene expression was visualized in single living mammalian cells with  $\beta$ -lactamase as a reporter that hydrolyzes a substrate loaded intracellularly as a membrane-permeant ester. Each enzyme mol. changed the fluorescence of many substrate mols. from green to blue by disrupting resonance energy transfer. This wavelength shift was detectable by eye or color film in individual cells containing less than 100  $\beta$ -lactamase mols. The robust change in emission ratio reveals quant. heterogeneity in real-time gene expression, enables clonal selection by flow cytometry, and forms a basis for high-throughput screening of pharmaceutical candidate drugs in living mammalian cells.

IT 183736-52-9 183736-69-8

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(quantitation of transcription and clonal selection of single living cells with  $\beta$ -lactamase as reporter)

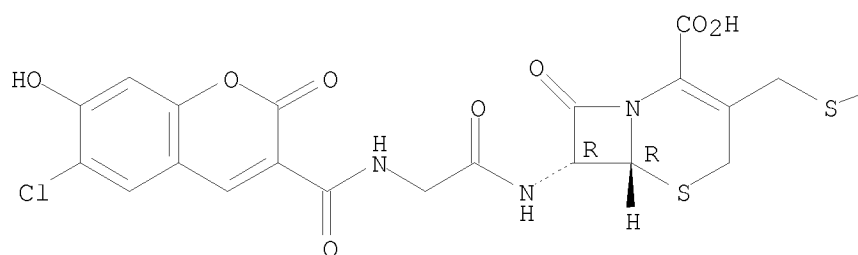
RN 183736-52-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9']-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

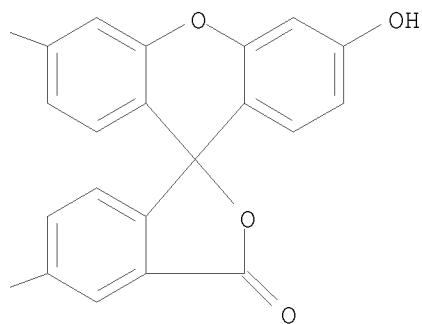
Absolute stereochemistry.

PAGE 1-A

HO



PAGE 1-B



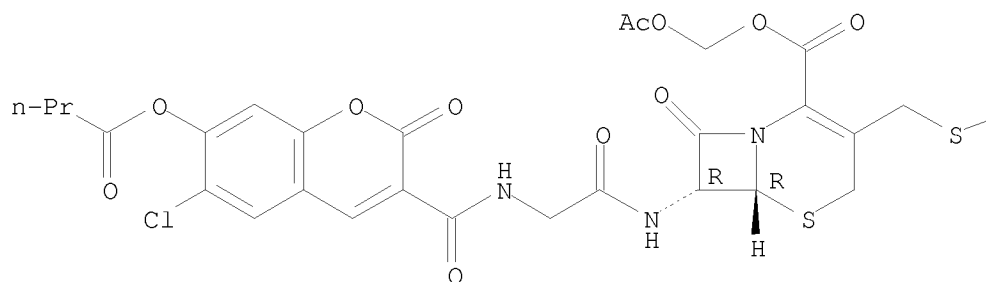
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-  
 (CA INDEX NAME)

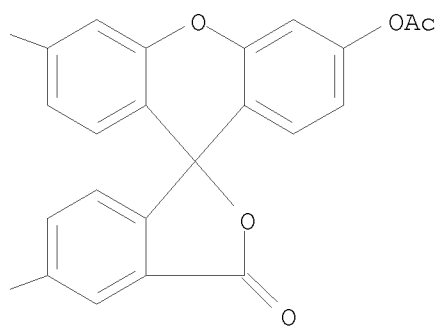
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT:	350	THERE ARE 350 CAPLUS RECORDS THAT CITE THIS RECORD (353 CITINGS)
REFERENCE COUNT:	26	THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 108 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:781508 CAPLUS

DOCUMENT NUMBER: 128:88534

ORIGINAL REFERENCE NO.: 128:17297a,17300a

TITLE: Solvent effect on the ionization constant and spectral behavior of some substituted coumarins

AUTHOR(S): Abbass, I. M.; Omar, M. M.; Issa, Y. M.

CORPORATE SOURCE: Dep. Chem., Fac. Sci., Cairo Univ., Giza, Egypt

SOURCE: Modelling, Measurement & Control, C: Energetics, Chemistry & Chemical Engineering, Earth, Resources, Environment, Biomedical Problems (1997), 56(1), 25-38

CODEN: MMCPE5; ISSN: 1259-5977

PUBLISHER: A.M.S.E.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The ionization consts. of some coumarin derivs. were determined pH-metrically in presence of some water-miscible organic solvents at  $25 \pm 0.1^\circ$  and ionic strength 0.1 M. The effect of solvent polarity on pK values is discussed. The ionization consts. depended mainly on the dielec. constant of the medium, decreasing in the order MeOH > EtOH > Me<sub>2</sub>CO. The electronic absorption spectra of the compds. studied in a number of organic solvents of varying polarities were also examined. The spectra indicate the presence of 3 absorption bands, which were assigned to the corresponding electronic transitions. The spectral shifts are not governed solely by the dielec. consts. of the solvents. The antimicrobial activity against wide varieties of microorganisms are studied.

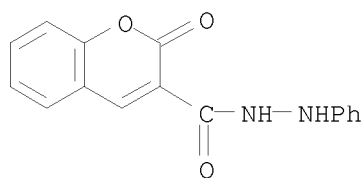
IT 1846-92-0, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide

RL: PRP (Properties)

(solvent effect on ionization constant and spectral behavior of some substituted coumarins)

RN 1846-92-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX NAME)

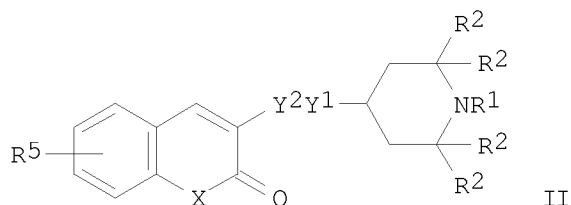
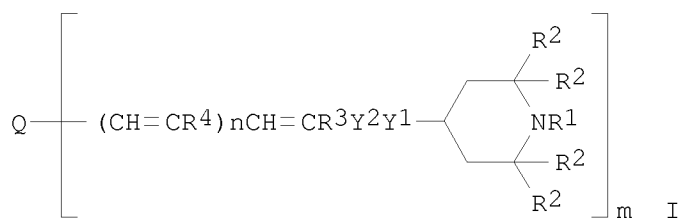


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 109 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:744609 CAPLUS  
DOCUMENT NUMBER: 128:23616  
ORIGINAL REFERENCE NO.: 128:4629a,4632a  
TITLE: Sterically hindered piperidine derivatives, their  
preparation and use as light stabilizers for polymers  
INVENTOR(S): Gaa, Karl; Zaeh, Matthias; Mehrer, Mathias; Pfahler,  
Gerhard  
PATENT ASSIGNEE(S): Hoechst A.-G., Germany  
SOURCE: Ger. Offen., 23 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19618197	A1	19971113	DE 1996-19618197	19960507 <--
WO 9742171	A1	19971113	WO 1997-EP2212	19970430 <--
W: AU, BR, CA, CN, CZ, IL, JP, KR, MX, NO, SG, TR, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9727750	A	19971126	AU 1997-27750	19970430 <--
EP 912514	A1	19990506	EP 1997-921831	19970430 <--
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 2000510174	T	20000808	JP 1997-539504	19970430 <--
TW 442477	B	20010623	TW 1997-86106040	19970505 <--
ZA 9703877	A	19971107	ZA 1997-3877	19970506 <--
KR 2000010801	A	20000225	KR 1998-708935	19981106 <--
PRIORITY APPLN. INFO.:			DE 1996-19618197	A 19960507
			WO 1997-EP2212	W 19970430
OTHER SOURCE(S):		MARPAT 128:23616		
GI				



AB Stabilizers for plastics for which the mol. weight can be increased by a

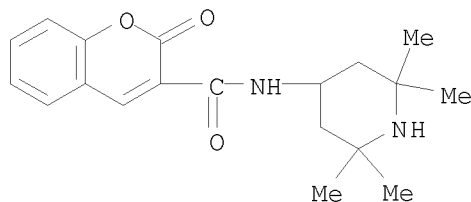
photochem. reaction are claimed. More specifically, the stabilizers have the structure I or II [Q = C6-20 aromatic residue; R1 = H, C1-20 alkyl, O., OH, NO, CH2CN, CH2Ph, CH2CH:CH2, C1-30 alkoxy, C5-12 cycloalkoxy, C3-10 alkenyl, C3-6 alkynyl, C1-10 acyl, halo, C7-10 aralkyl; R2 = H, C1-12 alkyl; R3 = CN, acyl, alkoxycarbonyl, aryl, etc.; R4 = H, halo, C1-4 alkyl, CN, NO2; R5 = H, C1-4 alkyl, CF3, C1-4 alkoxy, halo, CN, CO2H, NO2, amino, acyl, acyloxy; X, Y1 = O, NR6 (R6 = H, (cyclo)alkyl, aryl, hindered piperidin-4-yl); Y2 = CO, NHCO; m = 1-3; n = 0, 1]. For example, condensation of MeC6H4CH:CHCHO with bis(2,2,6,6-tetramethyl-4-piperidyl) malonate in PhMe in the presence of piperidine and HOAc gave a I with absorption maximum 330 nm in DMSO. Inclusion of 0.1 phr of this stabilizer in polypropylene increased the light stability from 200 to 880 h.

IT 199279-65-7P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(sterically hindered piperidine derivs. as light stabilizers for polymers)

RN 199279-65-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2,2,6,6-tetramethyl-4-piperidinyl)-  
(CA INDEX NAME)



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 110 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:637622 CAPLUS

DOCUMENT NUMBER: 127:262542

ORIGINAL REFERENCE NO.: 127:51277a,51280a

TITLE: Synthesis of novel coumarin-3-carboxylic acid derivatives as chemical detectors of hydroxyl radicals in biological systems

AUTHOR(S): Bezuglov, V. V.; Biaglow, J. E.; Manevich, Y.

CORPORATE SOURCE: Shemyakin-Ovchinnikov Inst. Bioorg. Chem., Russian Acad. Sci., Moscow, 117871, Russia

SOURCE: Bioorganicheskaya Khimiya (1997), 23(4), 310-313

CODEN: BIKHD7; ISSN: 0132-3423

PUBLISHER: MAIK Nauka

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 127:262542

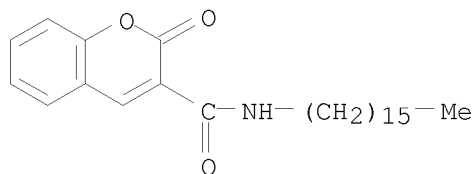
AB Synthesis of new coumarin-3-carboxylic acid amides and esters with phosphatidylethanolamine, cetylamine, cholesterol, and acetoxymethanol was described. When interacting with hydroxyl radicals generated by chemical methods or by  $\gamma$ -irradiation, these compds. formed intensely fluorescent hydroxylation products and can be used for a site-specific detection of hydroxyl radicals in biol. systems.

IT 196091-79-9P 196091-80-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of coumarincarboxylic acid derivs. as chemical detectors of hydroxyl radicals in biol. systems)

RN 196091-79-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hexadecyl-2-oxo- (CA INDEX NAME)



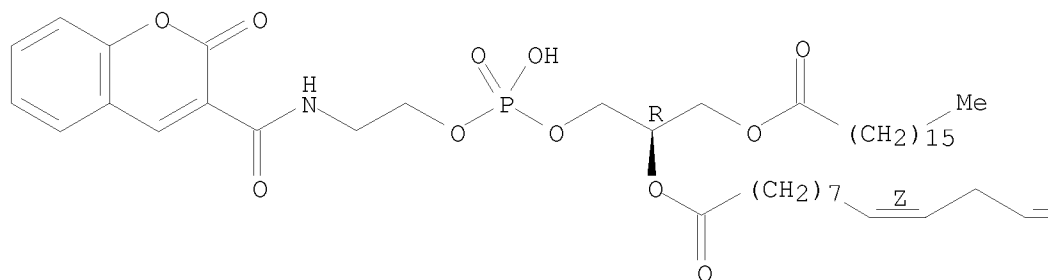
RN 196091-80-2 CAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)-,  
(1R)-4-hydroxy-4-oxido-9-oxo-9-(2-oxo-2H-1-benzopyran-3-yl)-1-[[1-(1-oxoheptadecyl)oxy]methyl]-3,5-dioxa-8-aza-4-phosphanon-1-yl ester (CA INDEX NAME)

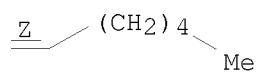
Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)



L9 ANSWER 111 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:457055 CAPLUS

DOCUMENT NUMBER: 127:62861

ORIGINAL REFERENCE NO.: 127:11965a

TITLE: Fluorometric detection of substances like nucleic acids immobilized on solid carriers

INVENTOR(S): Fujita, Satoshi; Kagiya, Naoto; Momiyama, Masayoshi; Kondo, Yasumitsu; Nishiyauchi, Miho

PATENT ASSIGNEE(S): Aisin Seiki Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 09152433	A	19970610	JP 1995-338038	19951130 <--
PRIORITY APPLN. INFO.:			JP 1995-338038	19951130

AB The method useful in mol. biol. and clin. virus detection, is for detecting substances like nucleic acids immobilized on solid carriers, by utilizing the reaction of enzymes and fluorescent substrates. An enzyme is bound to an analyte like nucleic acid immobilized on solid carrier (e.g. nylon film, nitrocellulose film, etc.). The enzyme is treated with fluorescent substance represented by R-F-B-A where R = enzyme reactant like phosphate group, and acetyl group, F = OH-containing fluorescent material (anthracene and naphthalene), B = carboxyamido group, and A = biphenyl group (orthobiphenyl or parabiphenyl). The reaction products are irradiated by excitation light, and fluorescent light emitted in response to the excitation light is measured.

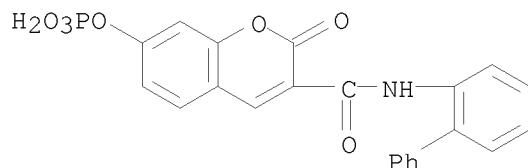
IT 191597-16-7

RL: AMX (Analytical matrix); ANST (Analytical study)

(in detection of substances like nucleic acids immobilized on solid carriers by fluorimetry)

RN 191597-16-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[1,1'-biphenyl]-2-yl-2-oxo-7-(phosphonooxy)- (CA INDEX NAME)



L9 ANSWER 112 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1997:283758 CAPLUS  
 DOCUMENT NUMBER: 126:264364  
 ORIGINAL REFERENCE NO.: 126:51209a,51212a  
 TITLE: Acylated oligopeptide derivatives having cell signal inhibiting activity  
 INVENTOR(S): Garcia-Echeverria, Carlos; Gay, Brigitte; Furet, Pascal; Rahuel, Joseph; Caravatti, Giorgio; Fretz, Heinz; Schoepfer, Joseph  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: PCT Int. Appl., 257 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708193	A1	19970306	WO 1996-EP3473	19960806 <--
W: AL, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2227516	A1	19970306	CA 1996-2227516	19960806 <--
AU 9667425	A	19970319	AU 1996-67425	19960806 <--
EP 846127	A1	19980610	EP 1996-927694	19960806 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
ZA 9606967	A	19970217	ZA 1996-6967	19960816 <--
PRIORITY APPLN. INFO.:			GB 1995-17060	A 19950817
			WO 1996-EP3473	W 19960806

OTHER SOURCE(S): MARPAT 126:264364

AB Peptides X-PTI-(AA)n-Y (AA = natural or unnatural amino acid residue, n = 0-15, PTI = tyrosine or preferably phosphotyrosine or phosphotyrosine mimic, X = arylcarbonyl, cycloalkylcarbonyl, tricycloalkylcarbonyl, arylsulfonyl, etc., Y = OH, C-terminal protecting group, amino group) or their salts were prepared for the treatment of diseases that respond to inhibition of the interaction of a protein comprising an SH2 domain and a protein tyrosine. Thus, 3-aminobenzyloxycarbonyl-Tyr(PO3H2)-Ile-Asn-Gln-NH2 trifluoroacetate salt was prepared by the solid phase method and had an IC50 value of 0.1 in a test system using the phosphorylated "tail" EGFR-MBP fusion protein as ligand. Formulations containing acylated oligopeptides are described.

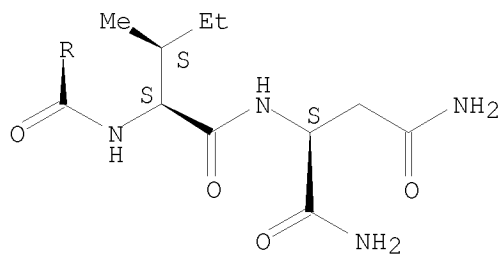
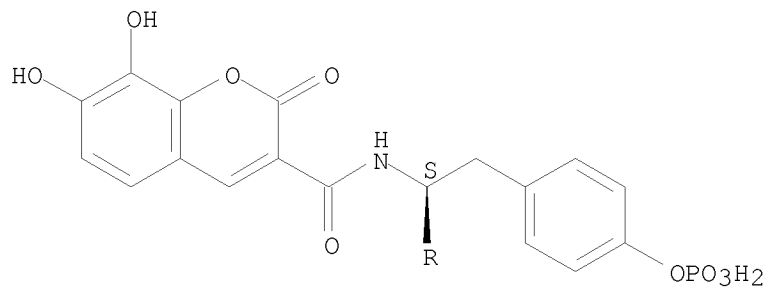
IT 188750-44-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of acylated oligopeptide derivs. having cell signal inhibiting activity)

RN 188750-44-9 CAPLUS

CN L-Aspartamide, N-[(7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-O-phosphono-L-tyrosyl-L-isoleucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)  
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 113 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1997:276022 CAPLUS  
 DOCUMENT NUMBER: 126:251069  
 ORIGINAL REFERENCE NO.: 126:48543a,48546a  
 TITLE: Preparation of 3-acylamino-2-oxoindoline derivatives  
 as cholecystokinin (CCK) antagonists  
 INVENTOR(S): Yamada, Koichiro; Hikoda, Masakatsu; Kano, Toshiaki;  
 Nagasaki, Masaaki  
 PATENT ASSIGNEE(S): Tanabe Seiyaku Co, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 09040557	A	19970210	JP 1996-125226	19960521 <--
JP 3168915	B2	20010521		
PRIORITY APPLN. INFO.:			JP 1995-125505	A 19950525
OTHER SOURCE(S):	MARPAT	126:251069		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; ring a = (un)substituted benzene ring; R1 = H, cycloalkyl, (un)substituted aryl, N-, O-, S-, N- and O-, or N- and S-containing heterocyclyl, lower alkoxy, optionally esterified CO<sub>2</sub>H, cyano, lower alkylthio, alkylsulfinyl, alkylsulfonyl, oxiranyl, 2-(lower alkylthio)-1-hydroxyethyl; R2 = (un)substituted aryl, Q1, Q2; n = 1,2; R3 = (un)substituted lower alkyl; Q = single bond, lower alkylene; Y = single bond, lower alkylene or alkenylene] or pharmacol. acceptable salts, which inhibit pancreatic excretion and are useful for the treatment and prevention of pancreatic, intestinal, or stomach disorders, or appetite-regulating system diseases, are prepared An cholecystokinin antagonist and a pharmaceutical composition containing I or pharmacol. acceptable salts thereof as the active ingredient for the treatment or prevention of acute or chronic pancreatitis, excessive secretion of pancreatic juice or stomach juice, pancreatic cancer, insulinoma, high blood insulin, irritable bowel syndrome, regurgitant (reflux) esophagitis, vomiting (emesis), loss of appetite, malevolence, cholecystalgia (biliary colic), and indigestion are claimed. Thus, 3-amino-2,3-dihydro-1H-indol-2-one hydrochloride was acylated by 3,4-dichlorobenzoyl chloride in the presence of Et<sub>3</sub>N in CH<sub>2</sub>Cl<sub>2</sub> at room temperature of at room temperature for 30 min to give 3,4-dichloro-N-(2,3-dihydro-2-oxo-1H-indol-3-yl)benzamide, which underwent addition reaction with Et acrylate in the presence of K<sub>2</sub>CO<sub>3</sub> in DMSO at room temperature for 1 h to give I (ring A = unsubstituted benzene ring, QR1 = H, YR2 = 3,4-dichlorobenzoyl, R3 = CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Et). The title compound (II) in vitro showed IC<sub>50</sub> of 0.2 nM for inhibiting the binding of 125I-CCK-8 to CCK receptor preparation from rat pancreas.

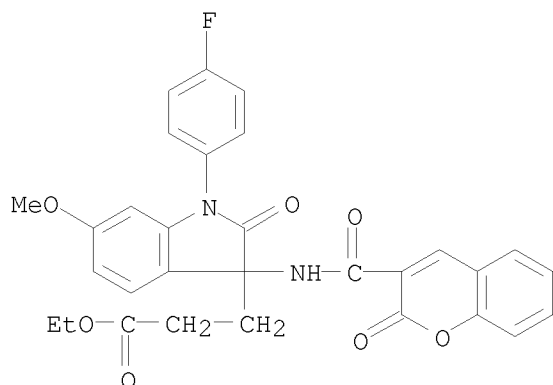
IT 169041-54-7P 169042-52-8P

10/513699

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of acylaminooxoindoline derivs. as cholecystokinin antagonists for disease therapy)

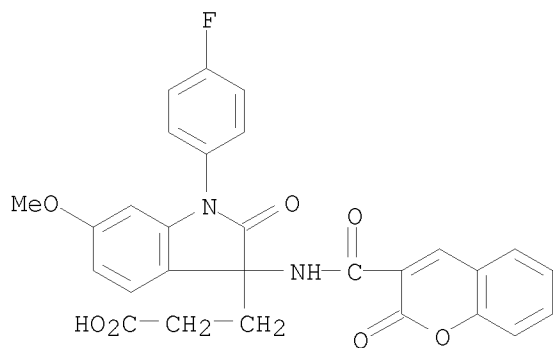
RN 169041-54-7 CAPLUS

CN 1H-Indole-3-propanoic acid, 1-(4-fluorophenyl)-2,3-dihydro-6-methoxy-2-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



RN 169042-52-8 CAPLUS

CN 1H-Indole-3-propanoic acid, 1-(4-fluorophenyl)-2,3-dihydro-6-methoxy-2-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



L9 ANSWER 114 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:260730 CAPLUS

DOCUMENT NUMBER: 126:305564

ORIGINAL REFERENCE NO.: 126:59187a,59190a

TITLE: Synthesis, characterization and screening of some new hydrazides and 2-aryl-5-(8-methoxycoumarin-3-yl)-1,3,4-oxadiazoles as antibacterials

AUTHOR(S): Shah, Sonal; Mehta, R. H.

CORPORATE SOURCE: Faculty Science, M. S. University Baroda, Baroda, 390 002, India

SOURCE: Journal of the Indian Chemical Society (1997), 74(3), 241-242

CODEN: JICSAH; ISSN: 0019-4522

PUBLISHER: Indian Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 126:305564

AB The acid chloride of 3-carboxy-8-methoxycoumarin was condensed with substituted benzohydrazides to give oxadiazoles. The second approach was to condense the parent acids with substituted benzohydrazides in the presence of POC13. The oxadiazoles, prepared in 55-70% yields, exhibited bactericidal activity.

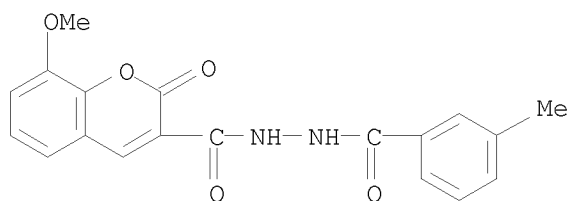
IT 189253-46-1P 189253-47-2P 189253-49-4P  
 189253-50-7P 189253-51-8P 189253-53-0P  
 189253-54-1P 189253-55-2P 189253-56-3P  
 189253-57-4P 189253-58-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of bactericidal coumarinyloxadiazoles by cyclization of carboxycoumarins with benzohydrazides)

RN 189253-46-1 CAPLUS

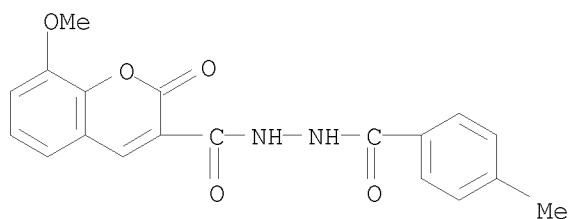
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
 2-(3-methylbenzoyl)hydrazide (CA INDEX NAME)



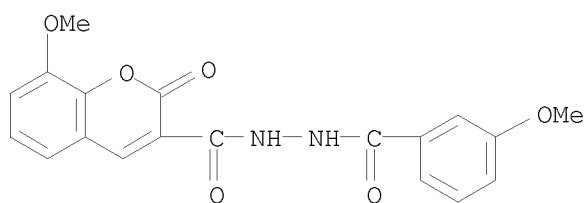
RN 189253-47-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
 2-(4-methylbenzoyl)hydrazide (CA INDEX NAME)

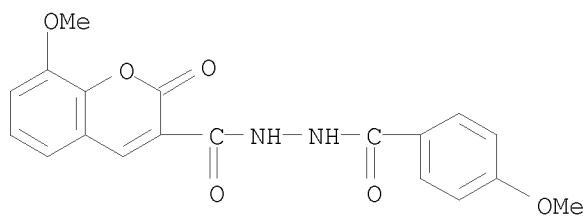
10/513699



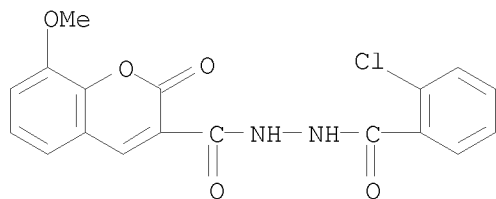
RN 189253-49-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(3-methoxybenzoyl)hydrazide (CA INDEX NAME)



RN 189253-50-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(4-methoxybenzoyl)hydrazide (CA INDEX NAME)

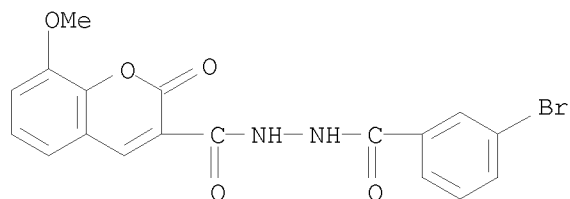


RN 189253-51-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(2-chlorobenzoyl)hydrazide (CA INDEX NAME)

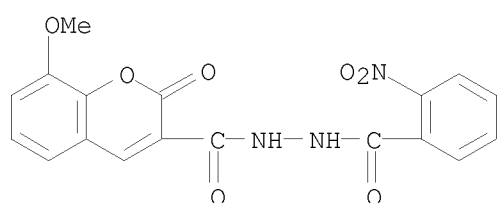


RN 189253-53-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(3-bromobenzoyl)hydrazide (CA INDEX NAME)

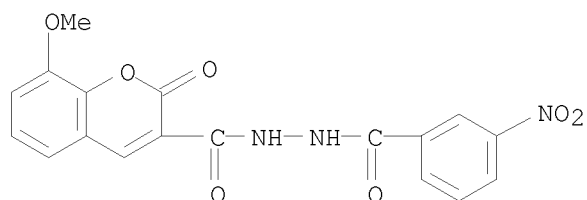
10/513699



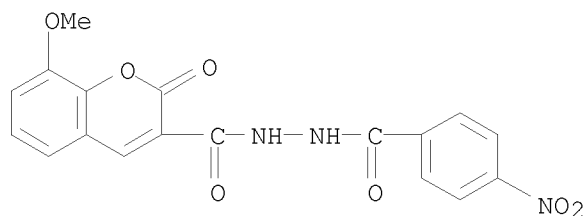
RN 189253-54-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(2-nitrobenzoyl)hydrazide (CA INDEX NAME)



RN 189253-55-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(3-nitrobenzoyl)hydrazide (CA INDEX NAME)



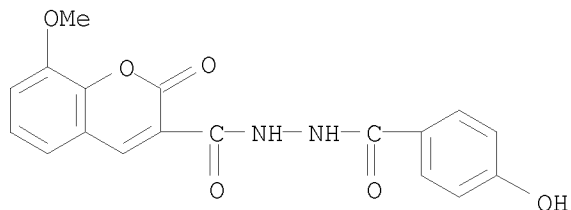
RN 189253-56-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(4-nitrobenzoyl)hydrazide (CA INDEX NAME)



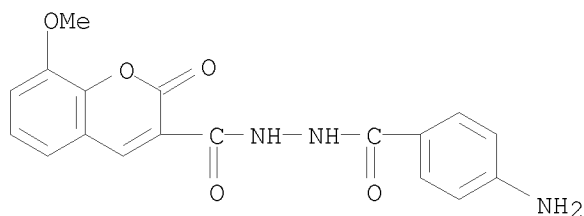
RN 189253-57-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(4-hydroxybenzoyl)hydrazide (CA INDEX NAME)



10/513699



RN 189253-58-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 8-methoxy-2-oxo-,  
2-(4-aminobenzoyl)hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)  
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 115 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:211303 CAPLUS  
DOCUMENT NUMBER: 126:277759  
ORIGINAL REFERENCE NO.: 126:53859a,53862a  
TITLE: Fluorescent Chemosensors for Divalent Zinc Based on  
Zinc Finger Domains. Enhanced Oxidative Stability,  
Metal Binding Affinity, and Structural and Functional  
Characterization  
AUTHOR(S): Walkup, Grant K.; Imperiali, Barbara  
CORPORATE SOURCE: Division of Chemistry and Chemical Engineering,  
California Institute of Technology, Pasadena, CA,  
91125, USA  
SOURCE: Journal of the American Chemical Society (1997  
, 119(15), 3443-3450  
CODEN: JACSAT; ISSN: 0002-7863  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The design, synthesis, and characterization of a family of peptides modeled after the zinc finger domains, which has led to the production of a fluorescent peptidyl sensor for divalent zinc with enhanced oxidative stability, are reported. The chemosensor design comprises a synthetic peptidyl template and a covalently attached fluorescent reporter which is sensitive to metal-induced conformational changes in the polypeptide construct. The modular synthetic approach employed for the construction of these chemosensors allows independent modification of the metal coordination sphere and the fluorescent reporter group. The structural, fluorescence, and zinc binding properties of these peptides and the effects of integrating various environment sensitive fluorophores, 4-(dimethylamino)benzamide, 5-(dimethylamino)naphthalenesulfonamide, and 3-carboxamidocoumarin, are described. Manipulation of the ligand sphere, by removal of one of the pair of thiolate ligands, was undertaken to enhance the oxidative stability of the chemosensor. For each of these peptides, the apparent dissociation constant of the peptide-zinc complex has been determined by spectroscopic methods. High-affinity binding, with dissociation

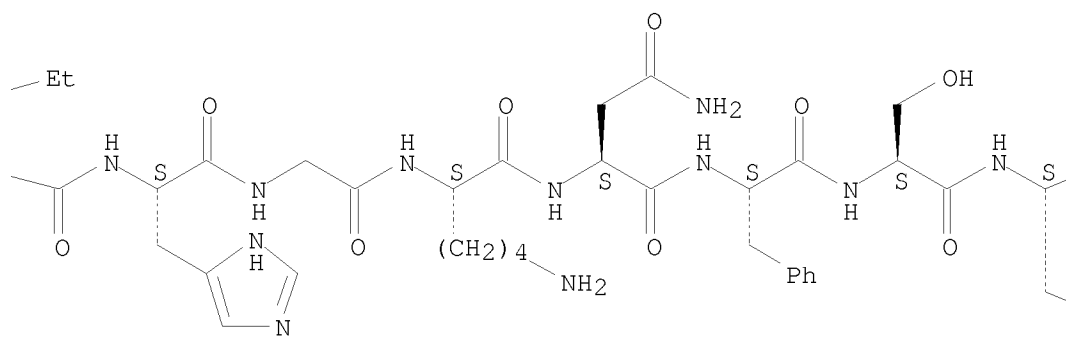
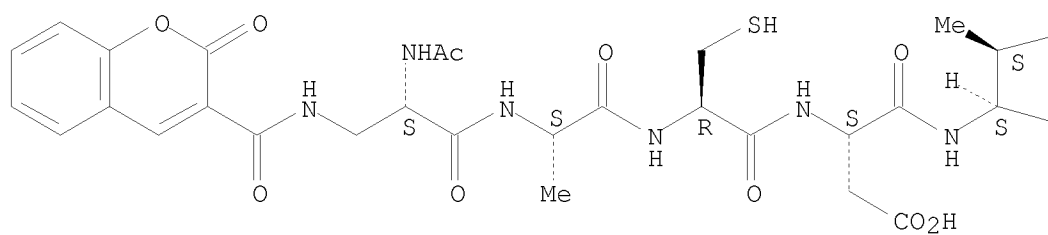
consts. ranging from 7 pM to 65 nM, is observed

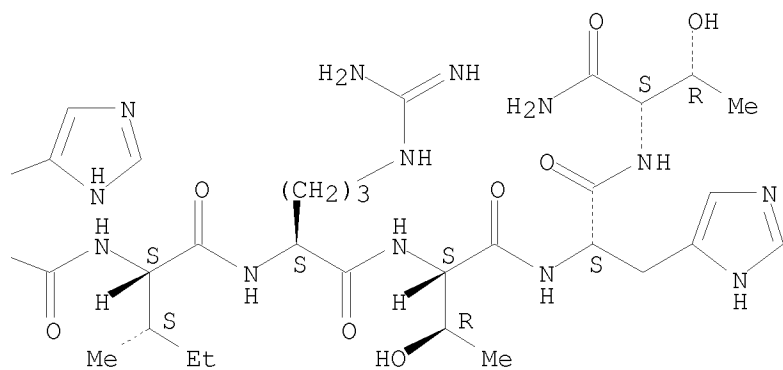
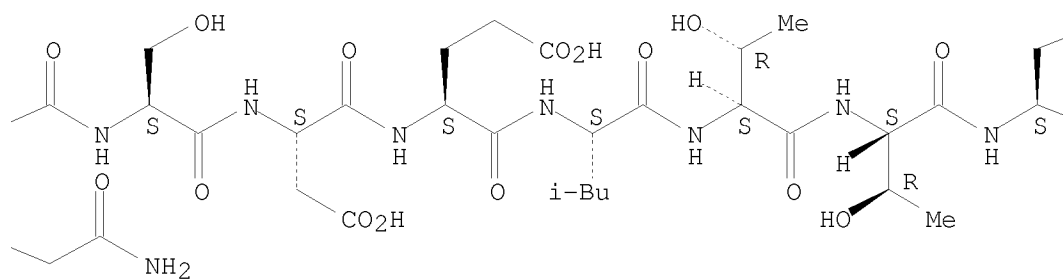
IT 188970-85-6P  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(enhanced oxidative stability, metal binding affinity, and structural and functional characterization of fluorescent chemosensors for divalent zinc based on zinc finger domains)

RN 188970-85-6 CAPLUS

CN L-Threoninamide, N-acetyl-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-L-alanyl-L-alanyl-L-cysteinyl-L- $\alpha$ -aspartyl-L-isoleucyl-L-histidylglycyl-L-lysyl-L-asparaginyl-L-phenylalanyl-L-seryl-L-glutaminy-L-seryl-L- $\alpha$ -aspartyl-L- $\alpha$ -glutamyl-L-leucyl-L-threonyl-L-threonyl-L-histidyl-L-isoleucyl-L-arginyl-L-threonyl-L-histidyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





OS.CITING REF COUNT:	153	THERE ARE 153 CAPLUS RECORDS THAT CITE THIS RECORD (154 CITINGS)
REFERENCE COUNT:	57	THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 116 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1997:148854 CAPLUS  
 DOCUMENT NUMBER: 126:154814  
 ORIGINAL REFERENCE NO.: 126:29875a  
 TITLE: Detection of transmembrane potentials by optical methods  
 INVENTOR(S): Tsien, Roger Y.; Gonzalez, Jesus E., III  
 PATENT ASSIGNEE(S): Regents of the University of California, USA; Tsien, Roger Y.; Gonzalez, Jesus, E. III  
 SOURCE: PCT Int. Appl., 112 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9641166	A2	19961219	WO 1996-US9652	19960606 <--
WO 9641166	A3	19970515		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
US 5661035	A	19970826	US 1995-481977	19950607 <--
CA 2223927	A1	19961219	CA 1996-2223927	19960606 <--
CA 2223927	C	20040406		
CA 2458360	A1	19961219	CA 1996-2458360	19960606 <--
AU 9662643	A	19961230	AU 1996-62643	19960606 <--
AU 716130	B2	20000217		
EP 834074	A1	19980408	EP 1996-921410	19960606 <--
EP 834074	B1	19991103		
EP 834074	B2	20051116		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11508355	T	19990721	JP 1997-501926	19960606 <--
JP 4033899	B2	20080116		
AT 186400	T	19991115	AT 1996-921410	19960606 <--
EP 977035	A2	20000202	EP 1999-113781	19960606 <--
EP 977035	A3	20000301		
EP 977035	B1	20050914		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
ES 2140870	T3	20000301	ES 1996-921410	19960606 <--
AT 304706	T	20050915	AT 1999-113781	19960606
EP 1610126	A1	20051228	EP 2005-15762	19960606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6107066	A	20000822	US 1997-765860	19970508 <--
US 20020137201	A1	20020926	US 1999-378534	19990820 <--
US 6596522	B2	20030722		
AU 9965287	A	20000406	AU 1999-65287	19991216 <--
AU 760738	B2	20030522		
US 20020164577	A1	20021107	US 2001-967772	20010928 <--
US 7173130	B2	20070206		

US 20030129670	A1	20030710	US 2002-334589	20021231
US 7115401	B2	20061003		
US 20030207248	A1	20031106	US 2002-335517	20021231
US 7087416	B2	20060808		
US 20040002123	A1	20040101	US 2002-334288	20021231
US 7118899	B2	20061010		
JP 2004231666	A	20040819	JP 2004-131475	20040427
JP 4064945	B2	20080319		
US 20070026384	A1	20070201	US 2006-529838	20060929
PRIORITY APPLN. INFO.:			US 1995-481977	A 19950607
			CA 1996-2223927	A3 19960606
			EP 1996-921410	A3 19960606
			EP 1999-113781	A3 19960606
			JP 1997-501926	A3 19960606
			WO 1996-US9652	W 19960606
			US 1997-765860	A1 19970508
			US 1999-378534	A1 19990820
			US 1999-459956	A1 19991213
			US 2001-967772	A1 20010928
			US 2002-334589	A1 20021231

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 126:154814

AB Methods and compns. are provided for determining the potential of a membrane.

In one aspect, the method comprises: (1) introducing a first reagent comprising a hydrophobic fluorescent ion capable of redistributing from a first face of the membrane to a second face of the membrane in response to changes in the potential of the membrane, as described by the Nernst equation; (2) introducing a second reagent which labels the first face or the second face of the membrane, which second reagent comprises a chromophore capable of undergoing energy transfer by either donating excited state energy to the fluorescent ion or accepting excited state energy from the fluorescent ion; (3) exposing the membrane to radiation; (4) measuring energy transfer between the fluorescent ion and the second reagent; and (5) relating the energy transfer to the membrane potential. Energy transfer is typically measured by fluorescence resonance energy transfer. In some embodiments the first and second reagents are bound together by a suitable linker. In one aspect, the method is used to identify compds. which modulate membrane potentials in biol. membranes.

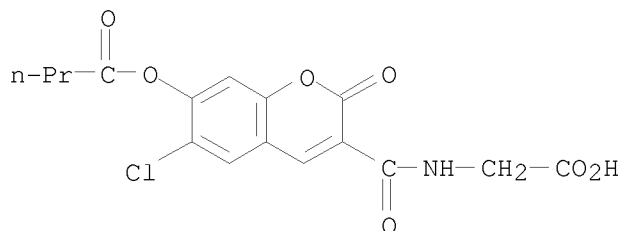
IT 183736-49-4P 183736-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(transmembrane potential determination by fluorescence resonance energy transfer method)

RN 183736-49-4 CAPLUS

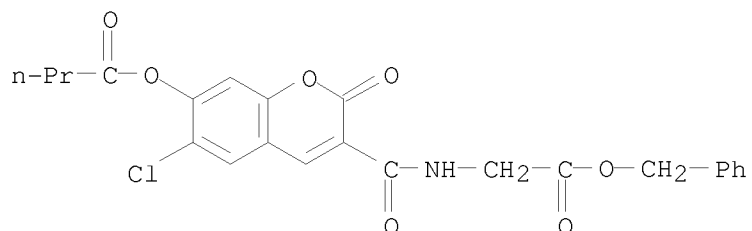
CN Butanoic acid, 3-[[[(carboxymethyl)amino]carbonyl]-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



10/513699

RN 183736-75-6 CAPLUS

CN Butanoic acid, 6-chloro-2-oxo-3-[[[2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



OS.CITING REF COUNT: 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 117 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:145245 CAPLUS  
DOCUMENT NUMBER: 126:157408  
ORIGINAL REFERENCE NO.: 126:30443a  
TITLE: Preparation of N-(arylcarbonyl or heterocyclylcarbonyl)amino(carboxyalkenyl)bicycloheptane derivatives or analogs thereof and prostaglandin D2 (PGD2) antagonists containing the same  
INVENTOR(S): Ohtani, Mitsuaki; Arimura, Akinori; Tsuru, Tatsuo; Kishino, Junji; Honma, Tsunetoshi  
PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 242 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9700853	A1	19970109	WO 1996-JP1685	19960619 <--
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2225250	A1	19970109	CA 1996-2225250	19960619 <--
CA 2225250	C	20050322		
AU 9661370	A	19970122	AU 1996-61370	19960619 <--
AU 714312	B2	19991223		
EP 837052	A1	19980422	EP 1996-918841	19960619 <--
EP 837052	B1	20060823		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
CN 1193315	A	19980916	CN 1996-196326	19960619 <--
CN 1134410	C	20040114		
HU 9802678	A2	19990201	HU 1998-2678	19960619 <--
HU 9802678	A3	19991228		
BR 9608498	A	19990706	BR 1996-8498	19960619 <--
CZ 285870	B6	19991117	CZ 1997-4013	19960619 <--
JP 3195361	B2	20010806	JP 1997-503724	19960619 <--
TW 513422	B	20021211	TW 1996-85107425	19960619 <--
PL 185107	B1	20030228	PL 1996-324115	19960619
AT 337294	T	20060915	AT 1996-918841	19960619
PT 837052	E	20061229	PT 1996-918841	19960619
ES 2270438	T3	20070401	ES 1996-918841	19960619
NO 9705994	A	19980223	NO 1997-5994	19971219 <--
US 6172113	B1	20010109	US 1998-973983	19980422 <--
US 6384075	B1	20020507	US 2000-506608	20000218 <--
US 6498190	B1	20021224	US 2000-506606	20000218 <--
JP 2001288160	A	20011016	JP 2001-73708	20010315 <--
JP 3701878	B2	20051005		
PRIORITY APPLN. INFO.:			JP 1995-154575	A 19950621
			JP 1997-503724	A3 19960619
			WO 1996-JP1685	W 19960619
			US 1998-973983	A3 19980422

<12/04/2007>

Erich Leese



## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 126:157408

GI For diagram(s), see printed CA Issue.

AB Compds. of general formula [I; ring Y = Q - Q3; A = alkylene optionally interrupted with phenylene or hetero atoms and optionally containing oxo and/or unsatd. bonds; B = H, alkyl, aralkyl, acyl; R = CO<sub>2</sub>R<sub>1</sub>, CH<sub>2</sub>OR<sub>2</sub>, CONR<sub>3</sub>R<sub>4</sub>; R<sub>1</sub>, R<sub>2</sub> = H, alkyl; R<sub>3</sub>, R<sub>4</sub> = H, alkyl, OH, alkylsulfonyl; X<sub>1</sub> = single bond, phenylene, naphthylene, thiophenediyl, indolediyl, oxazolediyl; X<sub>2</sub> = single bond, N:N, N:CH, CH:N, CH:NN, CH:NO, C:NNHCSNH, C:NNHCONH, CH:CH, CH(OH), CC1:CC1, (CH<sub>2</sub>)<sub>n</sub>, C.tplbond.C, NR<sub>5</sub>, NR<sub>5</sub>CO, NR<sub>5</sub>SO<sub>2</sub>, NR<sub>5</sub>CONR<sub>5</sub>, CONR<sub>5</sub>, SO<sub>2</sub>NR<sub>5</sub>, O, S, SO, SO<sub>2</sub>, CO, oxadiazolediyl, thiadiazolediyl, tetrazolediyl; wherein R<sub>5</sub> = H, alkyl; X<sub>3</sub> = alkyl, alkenyl, alkynyl, aryl, aralkyl, heterocyclyl, cycloalkyl, cycloalkenyl, thiazolylidene, etc.; Z = SO<sub>2</sub>, CO; m = 0,1; wherein if the substituents are in the form of rings, they may be optionally substituted] or salts thereof or hydrates thereof are prepared These compds. are useful as a PGD<sub>2</sub> antagonists and thus usable in, for example, a remedy for systemic mastocytosis or systemic mast cell activation disorders, a drug for bronchoconstriction, an antiasthmatic, a drug for allergic rhinitis agent, a drug for allergic conjunctivitis, a drug for urticaria, a remedy for ischemia reperfusion disorders or an antiinflammatory agent. They are particularly useful in the treatment of nasal occlusion. Thus, a bicyclo[2.2.1]heptane derivative (II; R = Me, R<sub>7</sub> = H) was condensed with 2-chlorosulfonyldibenzofuran in the presence of Et<sub>3</sub>N in CH<sub>2</sub>Cl<sub>2</sub> to give, after saponification, II .Na (R = H, R<sub>7</sub> = Q3). I in vitro inhibited the

binding of [3H]PGD<sub>2</sub> to PGD<sub>2</sub> receptor preparation from human blood platelet fraction with IC<sub>50</sub> of 0.003-8.6 μM. A tablet and granule formulation containing the title compound (III.1/2Ca) were described.

IT 186533-13-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

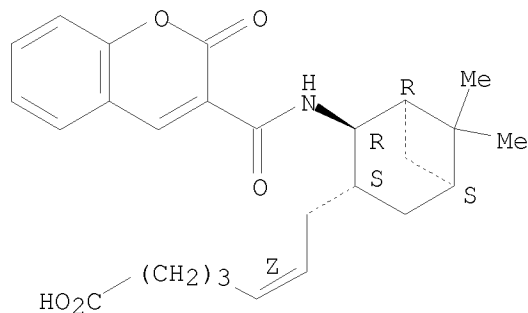
(preparation of amino(carboxyalkenyl)bicycloheptane derivs. as prostaglandin D<sub>2</sub> antagonists for disease therapy)

RN 186533-13-1 CAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3S,5S)-6,6-dimethyl-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]bicyclo[3.1.1]hept-3-yl]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (41 CITINGS)

10/513699

REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

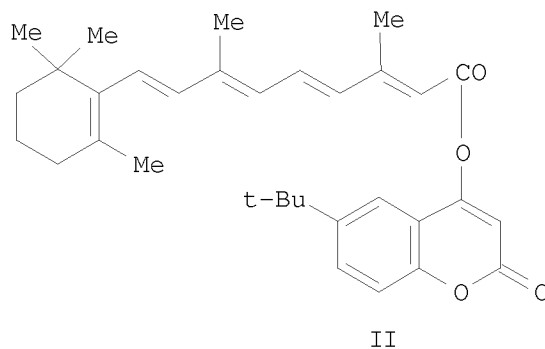
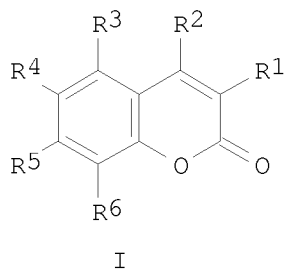
Erich Leese

10/513699

L9 ANSWER 118 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:116535 CAPLUS  
DOCUMENT NUMBER: 126:131663  
ORIGINAL REFERENCE NO.: 126:25433a,25436a  
TITLE: Preparation of anticancer retinoids  
INVENTOR(S): Han, Rui; Xu, Shi-Ping; Yuan, Zhang-Liang  
PATENT ASSIGNEE(S): Institute of Materia Medica, Peop. Rep. China;  
Mcinnis, Patricia, A.  
SOURCE: PCT Int. Appl., 48 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640669	A1	19961219	WO 1996-US10507	19960607 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
US 5716982	A	19980210	US 1995-487061	19950607 <--
CA 2223718	A1	19961219	CA 1996-2223718	19960607 <--
AU 9662830	A	19961230	AU 1996-62830	19960607 <--
AU 704273	B2	19990415		
EP 850233	A1	19980701	EP 1996-921669	19960607 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
JP 2001513070	T	20010828	JP 1997-502306	19960607 <--
PRIORITY APPLN. INFO.:			US 1995-487061	A 19950607
			WO 1996-US10507	W 19960607

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
OTHER SOURCE(S): MARPAT 126:131663  
GI



AB New retinoid compds., as coumarin retinoids I [R1 = H, alkyl, COR7 (R7 =

10/513699

H, OH, alkoxy), amino, Ph, substituted Ph; R2 = H, OH, alkyl, OR (R = retinoyl); R3 = H, Me, COR7, OR, CH2OR; R4 = halo, OH, alkyl, COR7, OR; R6 = H, Me, COR7, OR; wherein at least one of R2-R6 contains a retinoyl group] and/or purine retinoids were prepared as anticancer compds. Thus, 4-hydroxy-6-tert-butylcoumarin was treated with retinoic acid to give 4-retinoyloxy-6-tert-butylcoumarin (II). The anticancer NBT ED50 of II on HL-60 cells was  $> 10^{-5}$  (M).

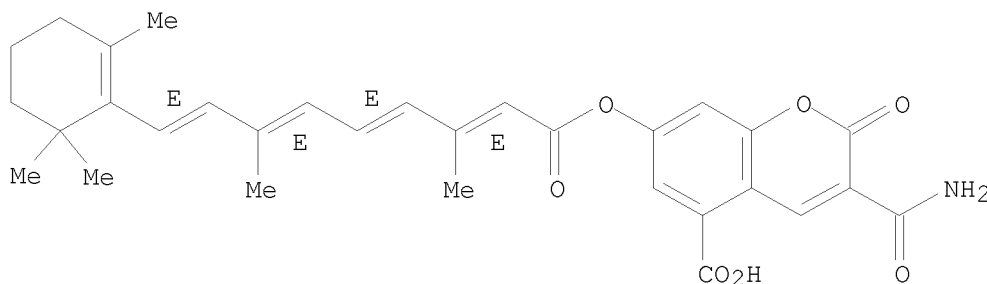
IT 186303-80-0P, XSP 5-5A 186303-81-1P, XSP 5-3B

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of anticancer retinoids)

RN 186303-80-0 CAPLUS

CN Retinoic acid, 3-(aminocarbonyl)-5-carboxy-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

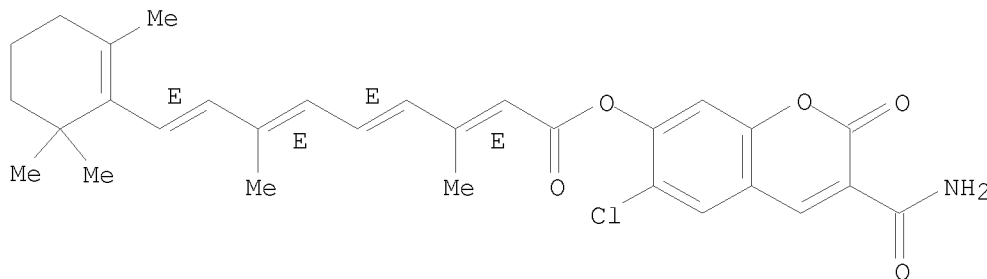
Double bond geometry as shown.



RN 186303-81-1 CAPLUS

CN Retinoic acid, 3-(aminocarbonyl)-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

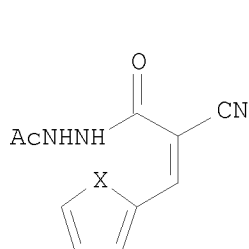


OS.CITING REF COUNT: 3

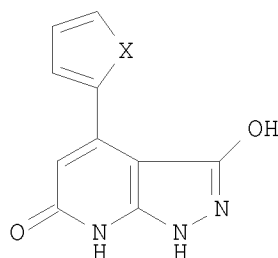
THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

10/513699

L9 ANSWER 119 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:108589 CAPLUS  
DOCUMENT NUMBER: 126:212094  
ORIGINAL REFERENCE NO.: 126:41019a, 41022a  
TITLE: Effect of the N-protecting groups on the chemical  
behavior of cyanoacetohydrazide  
AUTHOR(S): Haggag, B. M.; Chabaka, L. M.; Allam, Y. A.; Nawwar,  
G. A. M.  
CORPORATE SOURCE: Natl. Res. Cent., Cairo, Egypt  
SOURCE: Polish Journal of Chemistry (1997), 71(1),  
52-56  
CODEN: PJCHDQ; ISSN: 0137-5083  
PUBLISHER: Polish Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 126:212094  
GI

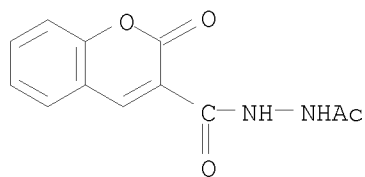


II



III

AB The behavior of the  $\text{RNHCOCH}_2\text{CN}$  [ $\text{R} = \text{AcNH}$  (I), tetrabromophthalimido] toward condensation reactions is described. Thus, treating I with 2-furaldehyde or 2-thiophenecarboxaldehyde gave hydrazides II ( $\text{X} = \text{O}, \text{S}$ ) whose further reactions are discussed or pyridoimidazoles III, depending on the reaction conditions.  
IT 188061-69-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(effect of N-protective groups on preparation from cyanoacetohydrazides)  
RN 188061-69-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-acetylhydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

<12/04/2007>

Erich Leese

10/513699

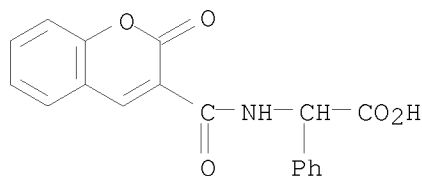
L9 ANSWER 120 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:91708 CAPLUS  
DOCUMENT NUMBER: 126:194850  
ORIGINAL REFERENCE NO.: 126:37467a,37470a  
TITLE: Facilitation of retinal function recovery by coumarin derivatives  
AUTHOR(S): Liu, Shirley X. L.; Kapingu, M. C.; Wang, Ming-Shi; Chiou, George C. Y.  
CORPORATE SOURCE: Inst. Ocular Pharmacology and Dep. Med. Pharmacology and Toxicology, Texas A&M Univ. Coll. Med., College Station, TX, USA  
SOURCE: Journal of Ocular Pharmacology and Therapeutics ( 1997), 13(1), 69-79  
CODEN: JOPTFU; ISSN: 1080-7683  
PUBLISHER: Liebert  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Ischemic retinopathy is a difficult disease to treat, although numerous drugs have been tried in the clinics. Coumarin was one of those tried as an anti-coagulant with a marginal efficacy. In this study, 15 coumarin derivs. were studied on the b-wave recovery in electroretinogram which is an indicator of the functional recovery of retina after ischemic insult. It was found that when positions 6, 7 and 8 were occupied by various functional groups, the b-wave recovery could be markedly enhanced. Single occupation of position 3 with any functional group would cause damaging effects to the anti-ischemic activity. It is concluded that some coumarin derivs. with two or all of these positions at 6, 7 and 8 occupied by certain functional groups could result in useful drugs for the treatment of ischemic retinopathy.

IT 132968-51-5  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(facilitation of retinal function recovery by coumarin derivs. in relation to structure)

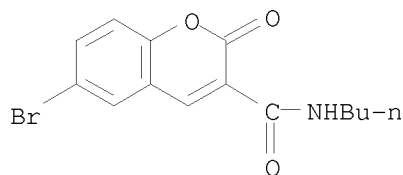
RN 132968-51-5 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
(CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L9 ANSWER 121 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1997:75511 CAPLUS  
 DOCUMENT NUMBER: 126:104505  
 ORIGINAL REFERENCE NO.: 126:20181a,20184a  
 TITLE: Polymers from coumarines. Synthesis and characterization of polyamides derived from 6-{{3-(chloroformyl)phenyl}ethynyl}coumarin-3-carboxylic acid chloride  
 AUTHOR(S): Fomine, Sergei; Fomina, Lioudmila; Sanchez, Carlos; Ortiz, Armando; Ogawa, Takeshi  
 CORPORATE SOURCE: Instituto de Investigaciones en Materiales, Universidad Nacional Autonoma de Mexico, Coyoacan, DF 04510, Mex.  
 SOURCE: Polymer Journal (Tokyo) (1997), 29(1), 49-57  
 CODEN: POLJB8; ISSN: 0032-3896  
 PUBLISHER: Society of Polymer Science, Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Coumarin-containing polyamides from 6-{{3-(chloroformyl)phenyl}ethynyl}coumarin-3-carboxylic acid chloride were prepared and characterized for the first time. They were soluble in common organic solvents such as N-methylpyrrolidone (NMP) and DMSO (DMSO) and gave transparent and tough films on casting. In the presence of excess diamine, the polymers underwent chemical transformation at room temperature, producing polyazomethines, as confirmed by the corresponding model reactions, and a possible reaction mechanism is proposed for this transformation. The coumarin containing polyamides showed emission and excitation maxima peaking at 464 and 398 nm, resp., in solution and exhibited 10% weight loss above 400°.  
 IT 38472-63-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (model; preparation and azomethine formation in (chloroformylphenylethynyl)coumarin-based polyamides)  
 RN 38472-63-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-butyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
 REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 122 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:735284 CAPLUS

DOCUMENT NUMBER: 126:99906

ORIGINAL REFERENCE NO.: 126:19173a,19176a

TITLE: Substrate properties of fluorescent ribonucleotides in the terminal transferase-catalyzed labeling of DNA sequencing primers

AUTHOR(S): Igloi, Gabor L.

CORPORATE SOURCE: Institut Biologie III, Universitaet Freiburg, Freiburg, D-79104, Germany

SOURCE: BioTechniques (1996), 21(6), 1084-1092

CODEN: BTNQDO; ISSN: 0736-6205

PUBLISHER: Eaton

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Terminal deoxynucleotidyltransferase (terminal transferase, E.C. 2.7.7.31) has been used to add a single fluorescent ribonucleotide to the 3' terminus of DNA sequencing primers, thereby creating primers suitable for automated DNA sequence anal. The previously introduced procedure using fluorescein-UTP for the postsynthetic labeling of primers can, under appropriate reaction conditions, now be extended to com. available fluorescein-ATP and fluorescein-CTP permitting greater flexibility in primer design. The products of these addition reactions have been shown to provide sequence data qual. and quant. identical to those obtained with conventional 5'-terminally labeled primers using cycle sequencing conditions in conjunction with an automated sequencer. Ribonucleotide derivs. of four other dyes (coumarin, tetramethylrhodamine, lissamine and Texas Red) were also examined for their potential in the terminal transferase-catalyzed reaction. Whereas coumarin-UTP was efficiently incorporated giving a monoaddn. product, the conjugates of all other dyes with ATP, CTP and UTP were extremely poor substrates under all conditions tested.

IT 185843-22-5

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

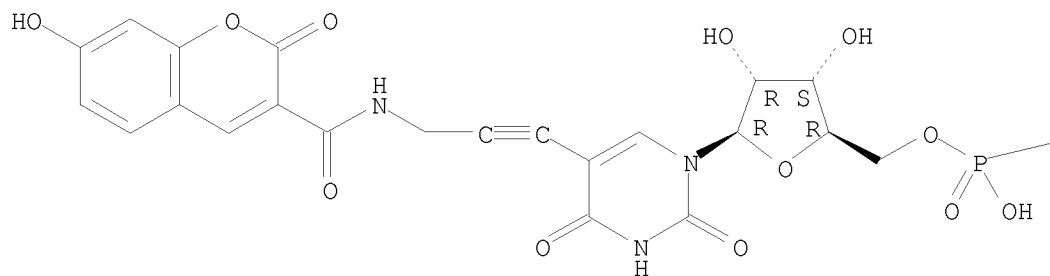
(labeling of DNA sequencing primers with; fluorescent ribonucleotides as substrates in terminal transferase-catalyzed labeling of DNA sequencing primers)

RN 185843-22-5 CAPLUS

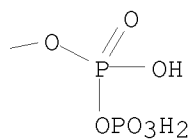
CN Uridine 5'-(tetrahydrogen triphosphate),  
5-[3-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1-propynyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT:

4

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L9 ANSWER 123 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1996:731813 CAPLUS  
 DOCUMENT NUMBER: 126:3785  
 ORIGINAL REFERENCE NO.: 126:867a,870a  
 TITLE: Fluorogenic  $\beta$ -lactam preparation and  
 $\beta$ -lactamase reporter gene assay for animal cell  
 transcription, transfection, or antibiotic resistance  
 INVENTOR(S): Tsien, Roger Y.; Zlokarnik, Gregor  
 PATENT ASSIGNEE(S): University of California, USA  
 SOURCE: PCT Int. Appl., 118 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 6  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9630540	A2	19961003	WO 1996-US4059	19960320 <--
WO 9630540	A3	19970109		
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
US 5741657	A	19980421	US 1995-407544	19950320 <--
CA 2215310	A1	19961003	CA 1996-2215310	19960320 <--
CA 2215310	C	20020521		
AU 9655266	A	19961016	AU 1996-55266	19960320 <--
AU 723164	B2	20000817		
EP 817785	A2	19980114	EP 1996-912454	19960320 <--
EP 817785	B1	20010404		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
CN 1184479	A	19980610	CN 1996-193854	19960320 <--
CN 1066731	C	20010606		
JP 11502714	T	19990309	JP 1996-529573	19960320 <--
JP 3633940	B2	20050330		
AT 200287	T	20010415	AT 1996-912454	19960320 <--
ES 2156994	T3	20010801	ES 1996-912454	19960320 <--
AT 253632	T	20031115	AT 1999-118473	19960320
PT 982398	E	20040227	PT 1999-118473	19960320
EP 1405922	A2	20040407	EP 2003-25361	19960320
EP 1405922	A3	20040929		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
ES 2209305	T3	20040616	ES 1999-118473	19960320
US 6291162	B1	20010918	US 1996-727616	19961015 <--
EP 982398	A1	20000301	EP 1999-118473	19990917 <--
EP 982398	B1	20031105		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI			
US 6472205	B1	20021029	US 2000-481756	20000111 <--
CN 1296078	A	20010523	CN 2000-122761	20000808 <--
CN 1213144	C	20050803		
US 20030119085	A1	20030626	US 2002-280482	20021024

US 7157575	B2	20070102		
JP 2005021172	A	20050127	JP 2004-305450	20041020
JP 3856807	B2	20061213		
US 20070020715	A1	20070125	US 2006-447691	20060605
US 20070184513	A1	20070809	US 2006-606642	20061129
PRIORITY APPLN. INFO.:			US 1995-407544	A2 19950320
			EP 1996-912454	A3 19960320
			JP 1996-529573	A3 19960320
			WO 1996-US4059	W 19960320
			US 1996-727616	A1 19961015
			EP 1999-118473	A3 19990917
			US 2000-481756	A1 20000111
			US 2001-261313P	P 20010112
			US 2002-44486	A2 20020111
			US 2002-280482	A2 20021024
			US 2004-884019	A2 20040702

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 126:3785

AB Fluorogenic  $\beta$ -lactam substrates are useful for detecting expression of the reporter gene,  $\beta$ -lactamase gene. Synthetic  $\beta$ -lactamase substrates with a fluorescent donor moiety in addition to a quencher moiety (which may or may not re-emit) are prepared and characterized. Synthetic substrates may include groups which are alkyl of 1 to about 5 carbon atoms or (CH<sub>2</sub>)<sub>n</sub>OH, in which n is 0 or an integer from 1 to 5. Synthetic substrates also may include physiologically acceptable metal and ammonium cations, -CHR<sub>2</sub>OCO(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, -CHR<sub>2</sub>OCOC(CH<sub>3</sub>)<sub>3</sub>, acylthiomethyl, acyloxy- $\alpha$ -benzyl,  $\delta$ -butyrolactonyl, methoxycarbonyloxymethyl, Ph, methylsulphinylmethyl,  $\beta$ -morpholinoethyl, dialkylaminoethyl, acyloxyalkyl, and dialkylaminocarbonyloxymethyl groups. S, O, SO, SO<sub>2</sub> and CH<sub>2</sub> as well as linkers for the fluorescent donor and quencher moieties are also included in synthetic  $\beta$ -lactamase substrates. Methods of assaying  $\beta$ -lactamase activity and monitoring expression in systems using  $\beta$ -lactamase as a reporter gene also are disclosed. Examples include Drosophila or zebrafish embryo transformation assays as well as animal cell glucocorticoid receptor-mediated or  $\beta$ -adrenergic receptor-mediated transcription assays.

IT 183736-52-9P

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)  
(CCF<sub>2</sub>, preparation and reaction with acetoxymethylbromide,  $\beta$ -lactam fluorogenic derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

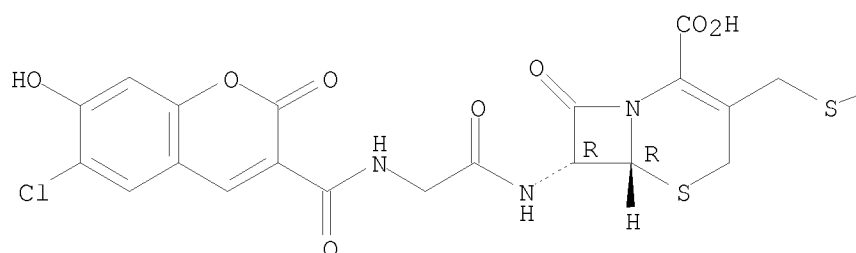
RN 183736-52-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-,  
(6R,7R)- (9CI) (CA INDEX NAME)

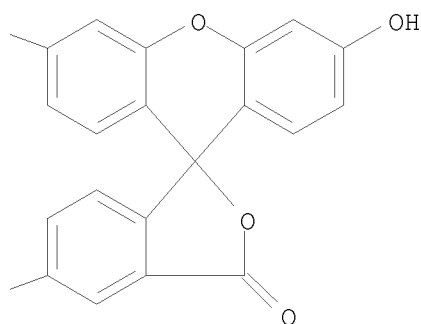
Absolute stereochemistry.

PAGE 1-A

HO—



PAGE 1-B



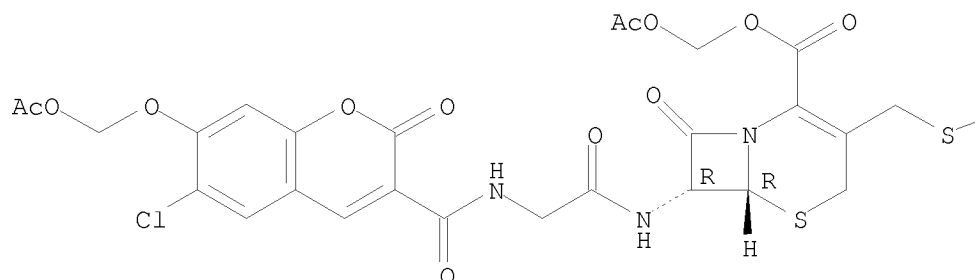
IT 183736-66-5P  
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (CCF2/ac2AM2, preparation, membrane permeable  $\beta$ -lactam fluorogenic derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

RN 183736-66-5 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[[[7-[(acetyloxy)methoxy]-6-chloro-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)- (9CI) (CA INDEX NAME)

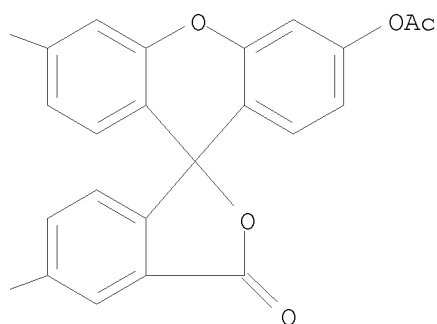
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



IT 183736-69-8P

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (CCF2/btAMac2, preparation, membrane permeant  $\beta$ -lactam fluorogenic derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

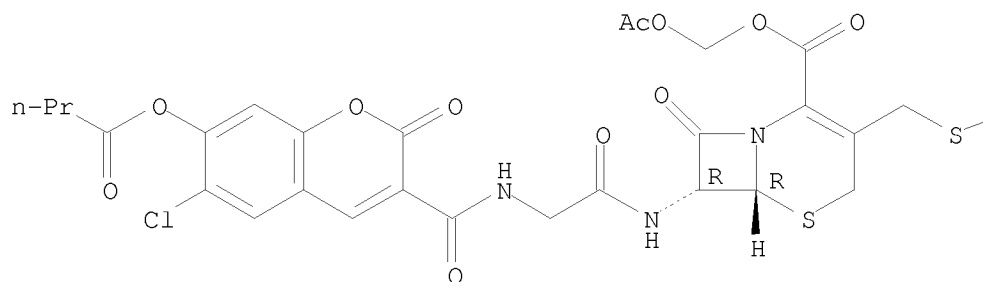
RN 183736-69-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester, (6R,7R)-(CA INDEX NAME)

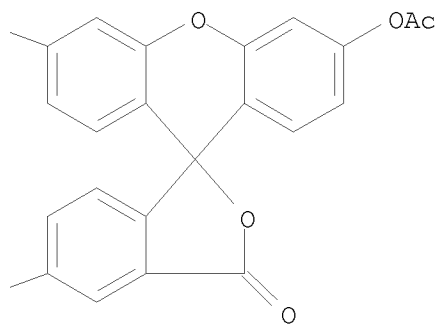
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



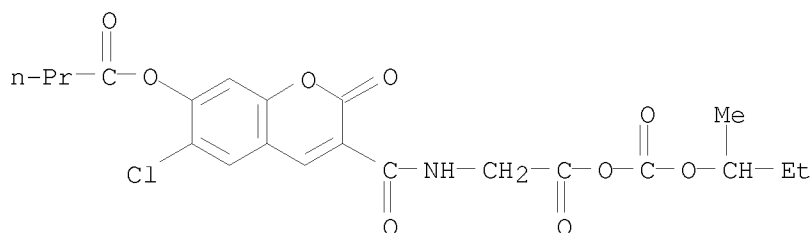
IT 183736-68-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(coupling reaction with fluorescein-cephalosporanic acid derivative;  
fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene  
assay for animal cell transcription, transfection, or antibiotic  
resistance)

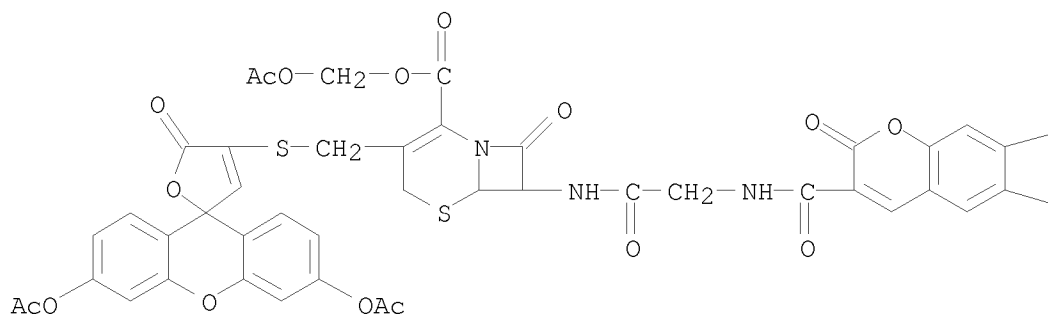
RN 183736-68-7 CAPLUS

CN Butanoic acid, 6-chloro-3-[[[2-[[[(1-methylpropoxy)carbonyl]oxy]-2-  
oxoethyl]amino]carbonyl]-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)

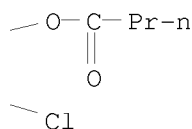


IT 183736-85-8 183736-86-9  
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)  
 (fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)  
 RN 183736-85-8 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[3',6'-bis(acetyloxy)-5-oxospiro[furan-2(5H),9'-[9H]xanthen]-4-yl]thio]methyl]-7-[[2-[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (acetyloxy)methyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

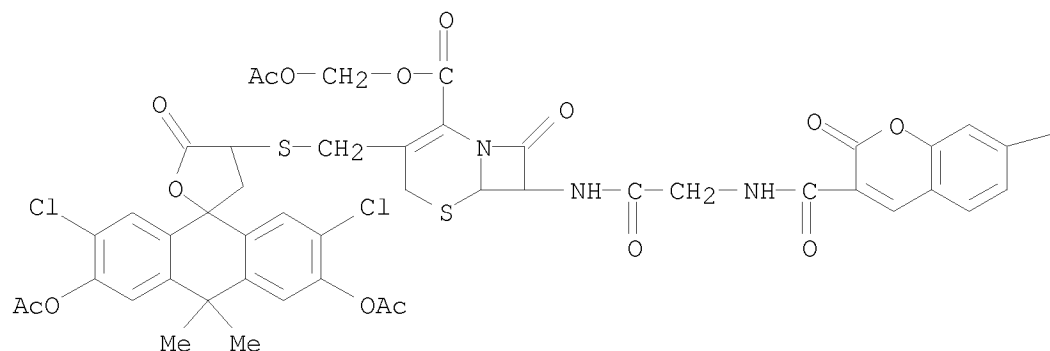


RN 183736-86-9 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[2-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-



yl]carbonyl]amino]acetyl]amino]-3-[[[3,6-bis(acetyloxy)-2,7-dichloro-4',5'-dihydro-10,10-dimethyl-5'-oxospiro[anthracene-9(10H),2'(3'H)-furan]-4'-yl]thio]methyl]-8-oxo-, (acetyloxy)methyl ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

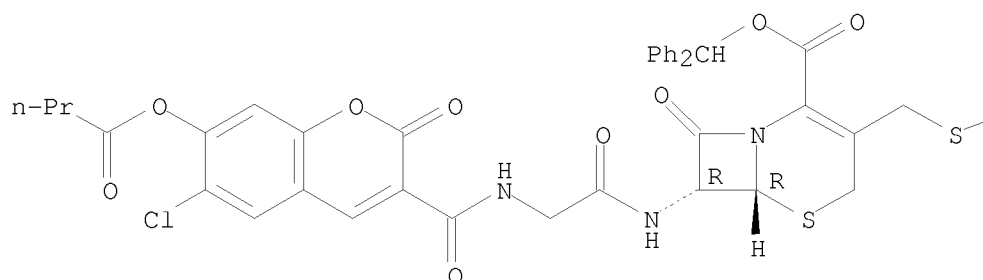
—OAc

IT 183736-83-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cleavage reaction; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)  
 RN 183736-83-6 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, diphenylmethyl ester, (6R,7R)-  
 (9CI) (CA INDEX NAME)

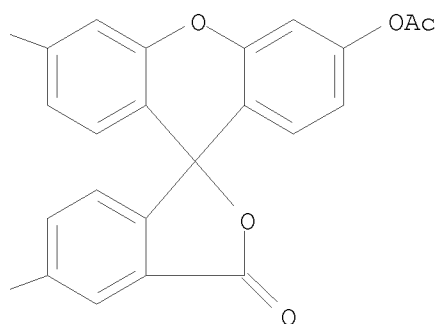
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



IT 183736-49-4P

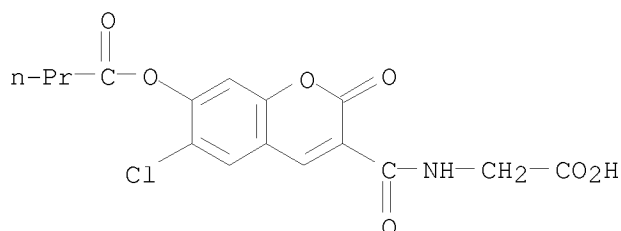
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and coupling reaction with cephalosporanic acid derivative; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

RN 183736-49-4 CAPLUS

CN Butanoic acid, 3-[[[(carboxymethyl)amino]carbonyl]-6-chloro-2-oxo-2H-1-benzopyran-7-yl ester (CA INDEX NAME)

10/513699



IT 183736-63-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

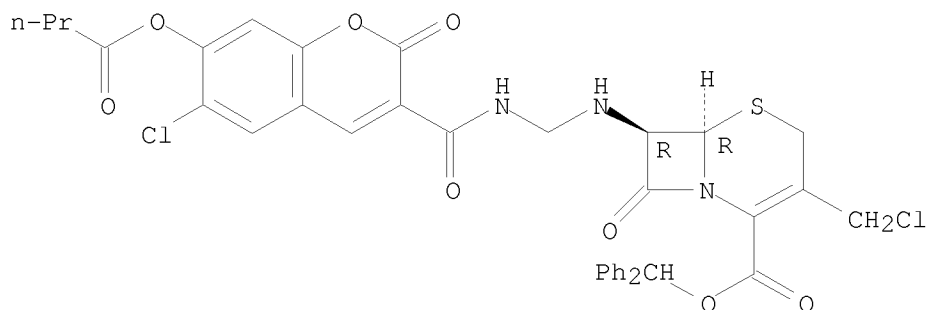
(preparation and coupling reaction with fluoresceinthiol derivative; fluorogenic

$\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

RN 183736-63-2 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-(chloromethyl)-7-[[[[(6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]amino]-8-oxo-, diphenylmethyl ester, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



IT 183736-64-3P 183736-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and deprotection; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

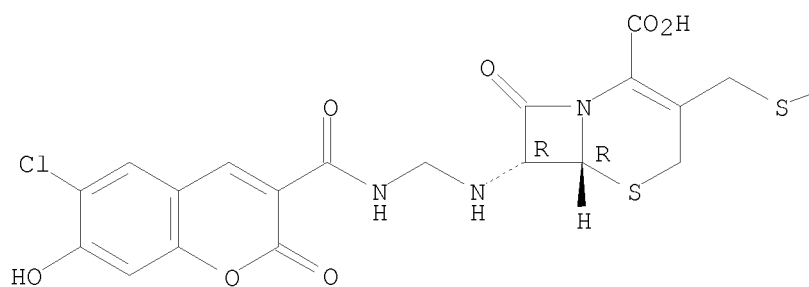
RN 183736-64-3 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[[(6-chloro-7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]amino]-3-[[ (3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)thio]methyl]-8-oxo-, (6R,7R)- (CA INDEX NAME)

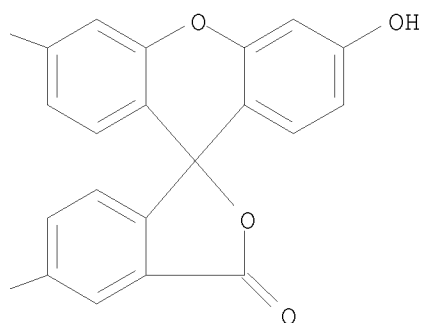
Absolute stereochemistry.

PAGE 1-A

HO—

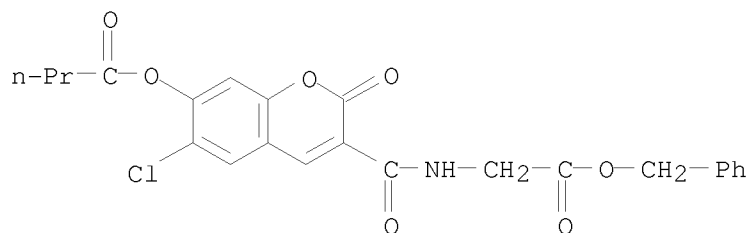


PAGE 1-B



RN 183736-75-6 CAPLUS

CN Butanoic acid, 6-chloro-2-oxo-3-[[[2-oxo-2-(phenylmethoxy)ethyl]amino]carbonyl]-2H-1-benzopyran-7-yl ester (CA INDEX NAME)



IT 183736-84-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and reaction with bromomethylacetate; fluorogenic  $\beta$ -lactam preparation and  $\beta$ -lactamase reporter gene assay for animal cell transcription, transfection, or antibiotic resistance)

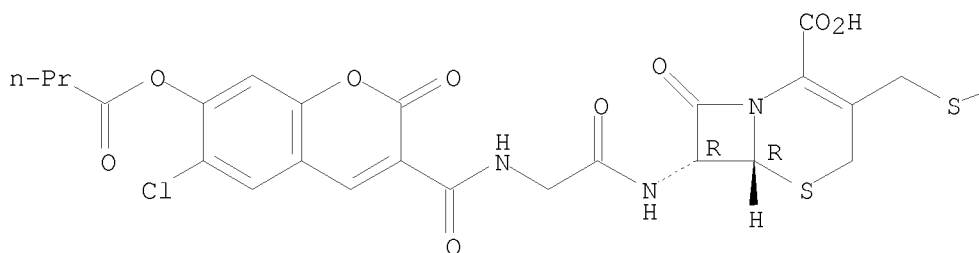
RN 183736-84-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[[[3',6'-bis(acetyloxy)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]thio]methyl]-7-[[[[[6-chloro-2-oxo-7-(1-oxobutoxy)-2H-1-benzopyran-3-yl]carbonyl]amino]acetyl]amino]-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

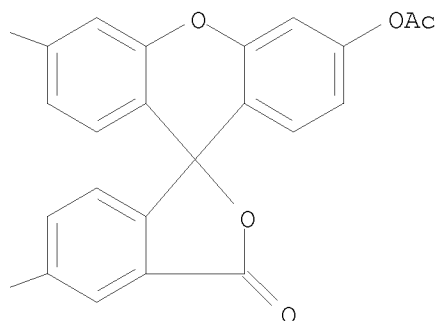
Absolute stereochemistry.

PAGE 1-A

AcO



PAGE 1-B



OS.CITING REF COUNT: 27

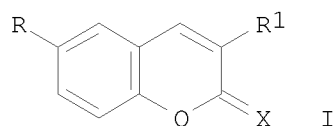
THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)

REFERENCE COUNT: 3

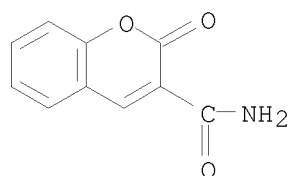
THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 124 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1996:683608 CAPLUS  
DOCUMENT NUMBER: 126:18749  
ORIGINAL REFERENCE NO.: 126:3897a,3900a  
TITLE: Synthesis and some transformations of functionally  
substituted coumarins and 2-thioxo-2H-chromenes  
AUTHOR(S): Avetisyan, A. A.; Aleksanyan, I. L.; Alvandzhyan, A.  
G.  
CORPORATE SOURCE: Erevan. Gos. Univ., Yerevan, 375049, Armenia  
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1996  
, (7), 909-912  
CODEN: KGSSAQ; ISSN: 0132-6244  
PUBLISHER: Latviiskii Institut Organicheskogo Sinteza  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 126:18749  
GI

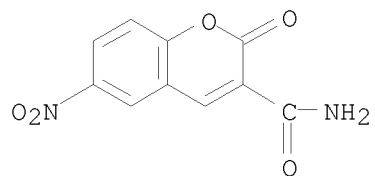


AB Conversions of coumarincarboxamide I (R = H, R1 = CONH2, X = O) to I (R = NO2, R1 = CONH2, X = O; R = H, R1 = COOH, X = O) and to thioxochromenes I (R, R1, X = H, CSNH2, S; H, CSOH, S; H, CSCl, S; H, CSOEt, S; NO2, CSOEt, S; etc.) were described.  
IT 1846-78-2, 3-Coumarincarboxamide  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation and reactions of coumarins and thioxochromenes)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



IT 83090-96-4P, 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reactions of coumarins and thioxochromenes)  
RN 83090-96-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 4

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L9 ANSWER 125 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:681493 CAPLUS

DOCUMENT NUMBER: 126:42242

ORIGINAL REFERENCE NO.: 126:8177a,8180a

TITLE: Development of Potent Thrombin Receptor Antagonist Peptides

AUTHOR(S): Bernatowicz, Michael S.; Klimas, Clifford E.; Hartl, Karen S.; Peluso, Marianne; Allegretto, Nick J.; Seiler, Steven M.

CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, NJ, 08543, USA

SOURCE: Journal of Medicinal Chemistry (1996), 39(25), 4879-4887

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A peptide-based structure-activity study is reported leading to the discovery of novel potent thrombin receptor antagonists. Systematic substitution of nonproteogenic amino acids for the 2nd and 3rd residues of the human thrombin receptor tethered ligand sequence (SFLLR) led to a series of agonists with enhanced potency. The most potent pentapeptide agonist identified was Ser-p-fluoroPhe-p-guanidinoPhe-Leu-Arg-NH<sub>2</sub> (I) (EC<sub>50</sub> .apprx.0.04  $\mu$ M for stimulation of human platelet aggregation, .apprx.10-fold more potent than the natural pentapeptide). Systematic substitution of the NH<sub>2</sub>-terminal Ser in I with neutral hydrophobic NH<sub>2</sub>-acyl groups led to partial agonists and eventually antagonists with unprecedented potency (>1000-fold increase over the previously reported antagonist 3-mercaptopropionyl-Phe-Cha-Cha-Arg-Lys-Pro-Asn-Asp-Lys-NH<sub>2</sub>). In the series of NH<sub>2</sub>-acyl tetrapeptide antagonists, N-trans-cinnamoyl-p-fluoroPhe-p-guanidinoPhe-Leu-Arg-NH<sub>2</sub> (II) was identified as the tightest binding (IC<sub>50</sub> .apprx.8 nM) and most potent with an IC<sub>50</sub> .apprx.0.20  $\mu$ M for inhibition of SFLLRNP-NH<sub>2</sub>-stimulated platelet aggregation. Systematic single substitutions in (II) indicated that, in addition to the NH<sub>2</sub>-terminal acyl group, the side chains at the 2nd and 3rd positions were also responsible for important and specific receptor interactions. The p-fluoroPhe and p-guanidinoPhe residues in the 2nd and 3rd positions of II were observed to be optimal in both the agonist and antagonist series. In the case of antagonists, however, an appropriately positioned pos. charged group (i.e., protonated base) at the 3rd residue was required. In contrast, such a substitution was not required for potent agonist activity. An even more potent antagonist resulted when II was extended at the C-terminus by a single Arg residue giving rise to analog BMS-200261 (III) which had an IC<sub>50</sub> .apprx.20 nM for inhibition of SFLLRNP-NH<sub>2</sub>-stimulated platelet aggregation. When the C-terminal Arg of III was replaced by an Orn(N $\delta$ -propionyl) residue, the resulting antagonist (BMS-200661) was suitable for use in radioligand binding assays (K<sub>d</sub> = 10-30 nM). Antagonist activity observed for selected compds. was verified through secondary assays in that these analogs prevented SFLLRNP-NH<sub>2</sub>-stimulated GTPase activity in platelet membranes and Ca<sup>2+</sup> mobilization in cultured human smooth muscle cells and mouse fibroblasts. Furthermore, this inhibition occurred at concns. that had no effect on thrombin catalytic activity, indicating a specific activity attributable to receptor binding and not enzyme inhibition.

IT 185028-23-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL



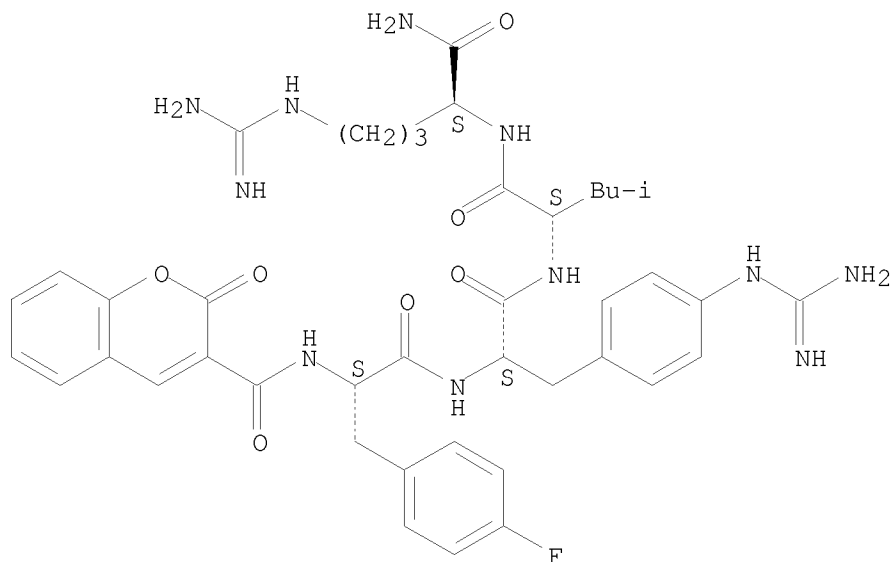
10/513699

(Biological study); PREP (Preparation)  
(development of potent thrombin receptor agonist and antagonist  
peptides)

RN 185028-23-3 CAPLUS

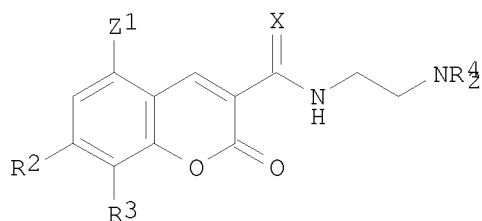
CN L-Argininamide, 4-fluoro-N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-phenylalanyl-4-[(aminoiminomethyl)amino]-L-phenylalanyl-L-leucyl- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 133 THERE ARE 133 CAPLUS RECORDS THAT CITE THIS  
RECORD (133 CITINGS)  
REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 126 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1996:662454 CAPLUS  
 DOCUMENT NUMBER: 126:18748  
 ORIGINAL REFERENCE NO.: 126:3897a,3900a  
 TITLE: Synthesis and photobiological activity of  
 N-substituted 2-oxo-2H-1-benzopyran-3-  
 (thio)carboxamides  
 AUTHOR(S): El-Ahmad, Youssef; Brion, Jean-Daniel; Reynaud,  
 Pierre; Averbeck, Dietrich; Averbeck, Simone  
 CORPORATE SOURCE: Laboratoire Chimie Therapeutique, Faculte Pharmacie,  
 Chatenay-Malabry, 92296, Fr.  
 SOURCE: Heterocycles (1996), 43(10), 2169-2177  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PUBLISHER: Japan Institute of Heterocyclic Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 126:18748  
 GI



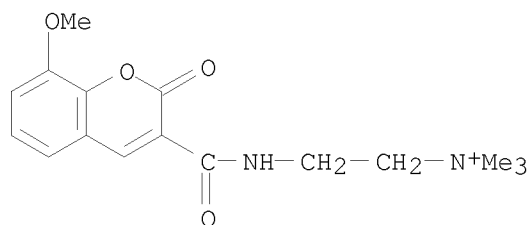
AB Several polyfunctional coumarins I (R1, R2, R3 = H, OMe; NR42 = NMe2, NEt2, morpholino; X = O, S) and the corresponding quaternary ammoniums, associated with a coplanar structure, have been synthesized in order to test the relationships between structure and photobiol. activity. In vitro studies on their phototoxic effects in yeasts suggest that five of them are able to intercalate in DNA and to covalently photobind to DNA.

IT 184169-17-3P 184169-18-4P 184169-19-5P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and yeast phototoxicity of oxobenzopyran(thio)carboxamides)

RN 184169-17-3 CAPLUS

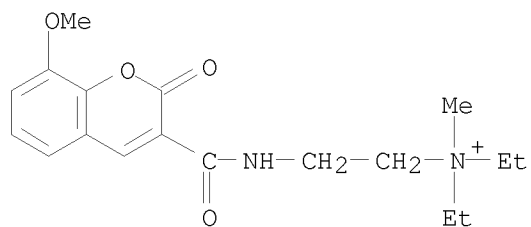
CN Ethanaminium, 2-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-N,N,N-trimethyl-, iodide (1:1) (CA INDEX NAME)

10/513699



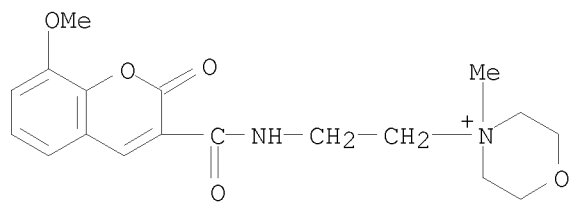
RN 184169-18-4 CAPLUS

CN Ethanaminium, N,N-diethyl-2-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-N-methyl-, iodide (1:1) (CA INDEX NAME)



RN 184169-19-5 CAPLUS

CN Morpholinium, 4-[2-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyl]-4-methyl-, iodide (1:1) (CA INDEX NAME)



IT 184169-05-9P 184169-06-0P 184169-07-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and yeast phototoxicity of oxobenzopyran(thio)carboxamides)

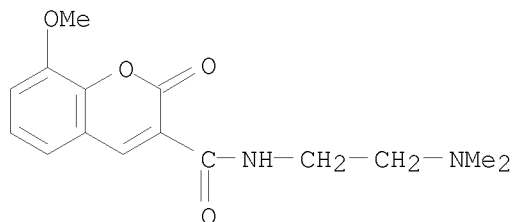
<12/04/2007>

Erich Leese

10/513699

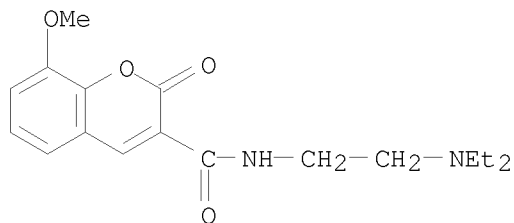
RN 184169-05-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(dimethylamino)ethyl]-8-methoxy-2-oxo-  
(CA INDEX NAME)



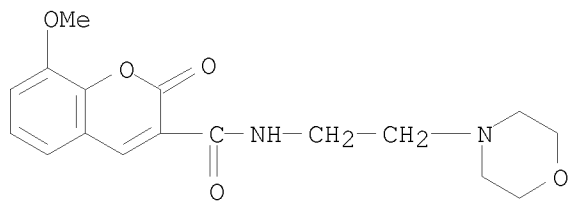
RN 184169-06-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(diethylamino)ethyl]-8-methoxy-2-oxo-  
(CA INDEX NAME)



RN 184169-07-1 CAPLUS

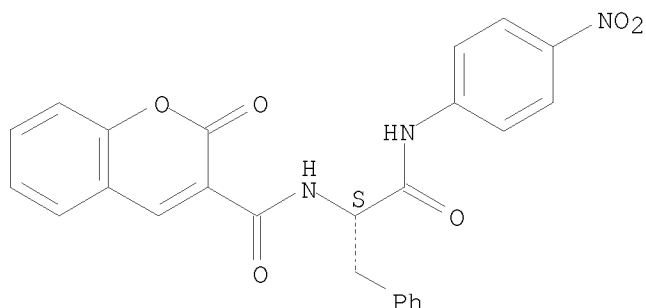
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-(4-morpholinyl)ethyl]-2-oxo-  
(CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 127 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1996:639677 CAPLUS  
DOCUMENT NUMBER: 125:295746  
ORIGINAL REFERENCE NO.: 125:55191a,55194a  
TITLE: N-coumarinyl- or N-quinolinonyl peptide  
p-nitroanilides as intramolecularly quenched  
fluorogenic substrates  
AUTHOR(S): Kokotos, G.; Charitos, C.; Tzougraki, C.  
CORPORATE SOURCE: Department Chemistry, University Athens, Athens,  
GR-15771, Greece  
SOURCE: Peptides 1994, Proceedings of the European Peptide  
Symposium, 23rd, Braga, Port., Sept. 4-10, 1994 ( 1995), Meeting Date 1994, 891-892. Editor(s):  
Maia, Hernani L. S. ESCOM: Leiden, Neth.  
CODEN: 63MBAO  
DOCUMENT TYPE: Conference  
LANGUAGE: English  
AB Intramolecularly quenched fluorogenic substrates for proteases, i.e. a  
peptide chain bearing a fluorophore on one end and a quencher on the  
other, have been used for the determination of various proteases. The  
synthesis  
of four model substrates and studies on the quenching of fluorescence of  
aminocoumarin or aminoquinolinone-type fluorophores by the p-nitroanilide  
group are now reported for the assay of neutral endopeptidase-24.11.  
IT 182944-07-6  
RL: ARG (Analytical reagent use); BPR (Biological process); BSU  
(Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study); PROC (Process); USES (Uses)  
(N-coumarinyl- or N-quinolinonyl peptide p-nitroanilides as  
intramolecularly quenched fluorogenic substrates)  
RN 182944-07-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(1S)-2-[(4-nitrophenyl)amino]-2-oxo-1-  
(phenylmethyl)ethyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



10/513699

L9 ANSWER 128 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1996:483856 CAPLUS  
DOCUMENT NUMBER: 125:162775  
ORIGINAL REFERENCE NO.: 125:30351a,30354a  
TITLE: Method and kits for determining peroxidatively active catalysts  
INVENTOR(S): Singh, Sharat; Switchenko, Arthur C.; Lin, Cheng-I.; Kurn, Nurith; Ullman, Edwin F.  
PATENT ASSIGNEE(S): Behringwerke Ag, Germany  
SOURCE: U.S., 33 pp., Cont. of U.S. Ser. No. 951,922, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 5532138	A	19960702	US 1994-263164	19940621 <--
PRIORITY APPLN. INFO.:			US 1990-516022	B1 19900426
			US 1992-951922	B1 19920806

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 125:162775

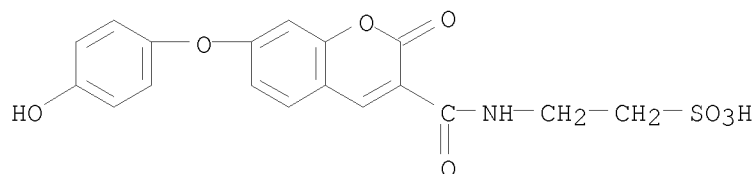
AB Methods and compns. are disclosed for determining a peroxidatively active catalyst, e.g., a peroxidase. The methods comprise the step of detecting a substance formed by the coupling reaction of (1) the product of the peroxidatively active catalyst-catalyzed oxidation of a benzidine with (2) a coupler other than benzidine. The methods have application in a wide variety of systems including assays for analytes, and especially enzyme immunoassays. Also disclosed are kits for conducting methods and assays in accordance with the present invention, and examples are given for the detection of Chlamydia in a clin. sample taken on a swab and for the detection of HIV antibodies in blood.

IT 159146-77-7

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (method and kits for determining peroxidase and peroxidatively active catalysts in biochem. anal.)

RN 159146-77-7 CAPLUS

CN Ethanesulfonic acid, 2-[[[7-(4-hydroxyphenoxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)  
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 129 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1996:462227 CAPLUS  
 DOCUMENT NUMBER: 125:115150  
 ORIGINAL REFERENCE NO.: 125:21643a,21646a  
 TITLE: Cyclic hexapeptides having antibiotic activity  
 INVENTOR(S): Ohki, Hidenori; Tomishima, Masaki; Yamada, Akira;  
 Takasugi, Hisashi  
 PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 273 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9611210	A1	19960418	WO 1995-JP1983	19950929 <--
W: AU, CA, CN, FI, HU, JP, KR, MX, NO, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2202058	A1	19960418	CA 1995-2202058	19950929 <--
CA 2202058	C	20071106		
AU 9535780	A	19960502	AU 1995-35780	19950929 <--
AU 696949	B2	19980924		
EP 788511	A1	19970813	EP 1995-932935	19950929 <--
EP 788511	B1	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1168675	A	19971224	CN 1995-196643	19950929 <--
CN 1203089	C	20050525		
JP 10507174	T	19980714	JP 1995-512472	19950929 <--
JP 2897427	B2	19990531		
HU 77736	A2	19980728	HU 1998-338	19950929 <--
JP 10324695	A	19981208	JP 1998-136756	19950929 <--
JP 3518665	B2	20040412		
RU 2165423	C2	20010420	RU 1997-107338	19950929 <--
AT 229541	T	20021215	AT 1995-932935	19950929 <--
PT 788511	E	20030430	PT 1995-932935	19950929
ES 2187575	T3	20030616	ES 1995-932935	19950929
IL 115484	A	20000716	IL 1995-115484	19951002 <--
ZA 9508458	A	19960507	ZA 1995-8458	19951006 <--
BR 9504791	A	19961022	BR 1995-4791	19951006 <--
TW 562808	B	20031121	TW 1995-84110544	19951006
IN 1995MA01286	A	20050225	IN 1995-MA1286	19951006
FI 9701397	A	19970527	FI 1997-1397	19970404 <--
FI 119988	B1	20090529		
NO 9701544	A	19970604	NO 1997-1544	19970404 <--
US 6107458	A	20000822	US 1997-809723	19970521 <--
HK 1004136	A1	20050826	HK 1998-103576	19980428
US 6265536	B1	20010724	US 1999-248267	19990211 <--
PRIORITY APPLN. INFO.:			GB 1994-20425	A 19941007
			GB 1995-8745	A 19950428
			JP 1996-512472	A3 19950929
			WO 1995-JP1983	W 19950929
			US 1997-809723	A3 19970521

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 OTHER SOURCE(S): MARPAT 125:115150

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to new cyclic polypeptide derivs. I [R1 = variety of substituted acyl groups] and their pharmaceutically acceptable salts. The compds. have antimicrobial activities (especially, antifungal activities) and inhibitory activity on  $\beta$ -1,3-glucan synthase (no data), and are useful for prophylactic and/or therapeutic treatment of infectious diseases including *Pneumocystis carinii* infection (e.g., *P. carinii* pneumonia). Examples include 124 compds. I, plus 346 precursor preps. For instance, reaction of the precursor I.Na [R1 = H] with 1-[6-[(octyloxy)methyl]picolinoyl]benzotriazole 3-oxide in DMF in the presence of DMAP gave title compound I [R1 = Q1]. In a test against *Candida albicans* FP-633 in vitro, I [R1 = Q2] had MIC of 0.2  $\mu\text{g/mL}$ .

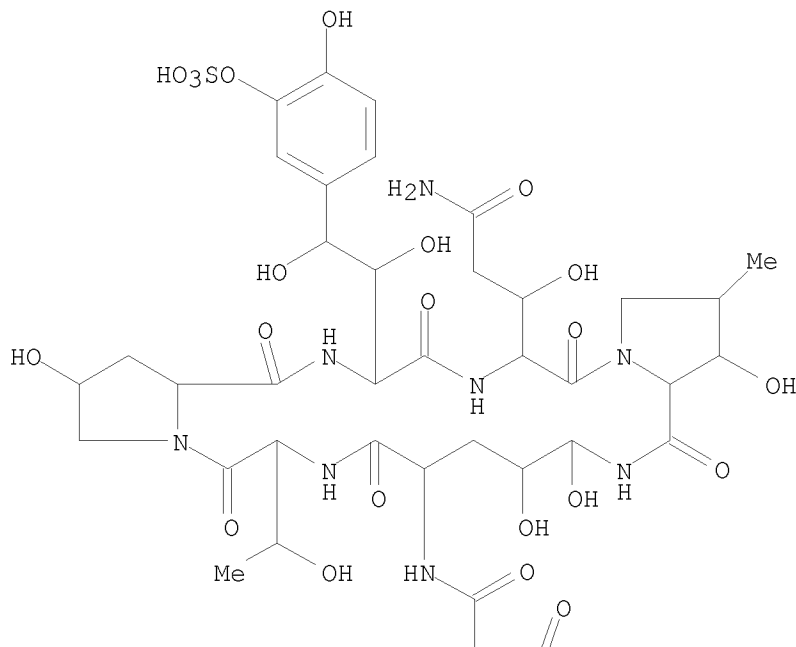
IT 179165-54-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of cyclic hexapeptides active against fungi and *Pneumocystis carinii*)

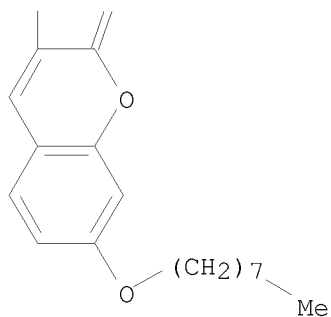
RN 179165-54-9 CAPLUS

CN Proline, 4,5-dihydroxy-N2-[[7-(octyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]ornithylthreonyl-4-hydroxyprolyl-4-hydroxy-4-[4-hydroxy-3-(sulfooxy)phenyl]threonyl-3-hydroxyglutaminy-3-hydroxy-4-methyl-, cyclic (6 $\rightarrow$ 1)-peptide, monosodium salt (9CI) (CA INDEX NAME)

PAGE 1-A





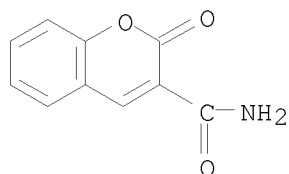


● Na

OS.CITING REF COUNT:	27	THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (86 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 130 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1996:390564 CAPLUS  
DOCUMENT NUMBER: 125:156913  
ORIGINAL REFERENCE NO.: 125:29071a,29074a  
TITLE: Molecular structure of [VO(sal-D,L-Asn)(py)(H2O)] and  
reaction to produce coumarin-3-carboxamide  
AUTHOR(S): Cavaco, Isabel; Pessoa, Joao Costa; Duarte, Maria T.;  
Gillard, Robert D.; Matias, Pedro  
CORPORATE SOURCE: Centro Quimica Estrutural, Inst. Superior Tenico,  
Lisbon, 1096, Port.  
SOURCE: Chemical Communications (Cambridge) (1996),  
(11), 1365-1366  
CODEN: CHCOFS; ISSN: 1359-7345  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The reaction of VO2+ with salicylaldehyde, asparagine and pyridine forms  
[VO(sal-D,L-Asn)(py)(H2O)]. Coumarin-3-carboxamide is produced from the  
same system on ageing with di-oxygen. Both compds. were characterized by  
x-ray diffraction.  
IT 1846-78-2P, Coumarin-3-carboxamide  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation by oxidative decarbonylation of asparagine and crystal  
structure)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS  
RECORD (24 CITINGS)

L9 ANSWER 131 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:328195 CAPLUS

DOCUMENT NUMBER: 125:323

ORIGINAL REFERENCE NO.: 125:55a,58a

TITLE: Esters and Amides of  
6-(Chloromethyl)-2-oxo-2H-1-benzopyran-3-carboxylic  
Acid as Inhibitors of  $\alpha$ -Chymotrypsin:

AUTHOR(S): Significance of the "Aromatic" Nature of the Novel  
Ester-Type Coumarin for Strong Inhibitory Activity  
Pochet, Lionel; Doucet, Caroline; Schynts, Marc;  
Thierry, Nicole; Boggetto, Nicole; Pirotte, Bernard;  
Jiang, Kai Y.; Masereel, Bernard; de Tullio, Pascal;  
et al.

CORPORATE SOURCE: Laboratoire de Chimie Pharmaceutique, Universite de  
Liege, Liege, B-4000, Belg.

SOURCE: Journal of Medicinal Chemistry (1996),  
39(13), 2579-2585

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of esters and amides of 6-(chloromethyl)-2-oxo-2H-1-benzopyran-3-carboxylic acid were synthesized and evaluated in vitro for their inhibitory activity toward bovine  $\alpha$ -chymotrypsin and human leukocyte elastase. Both series behaved as time-dependent inhibitors of  $\alpha$ -chymotrypsin, but ester-type coumarins were clearly more efficient than the corresponding amides in inactivating the serine proteinase. The best inactivation was observed with "aromatic" esters, in particular with meta-substituted Ph esters such as m-chlorophenyl 6-(chloromethyl)-2-oxo-2H-1-benzopyran-3-carboxylate, which appears to be one of the most powerful inactivators of  $\alpha$ -chymotrypsin yet reported (kinact/KI = 760 000 M<sup>-1</sup> s<sup>-1</sup> at pH 7.5 and 25°). Usually, the coumarin derivs. failed to inhibit significantly human leukocyte elastase. As a result, the reported series of aromatic coumarinic esters behaves as a new chemical family of selective  $\alpha$ -chymotrypsin inhibitors.

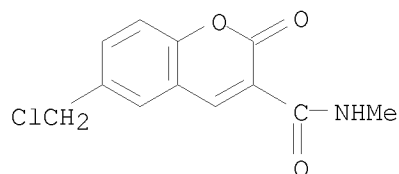
IT 176770-43-7P 176770-44-8P 176770-45-9P  
176770-46-0P 176770-47-1P 176770-48-2P  
176770-49-3P 176770-50-6P 176770-51-7P  
176770-52-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of esters and amides of  
6-(chloromethyl)-2-oxo-2H-1-benzopyran-3-carboxylic acid as inhibitors  
of  $\alpha$ -chymotrypsin)

RN 176770-43-7 CAPLUS

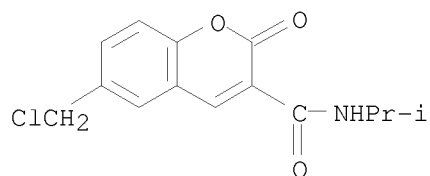
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-methyl-2-oxo- (CA INDEX  
NAME)



10/513699

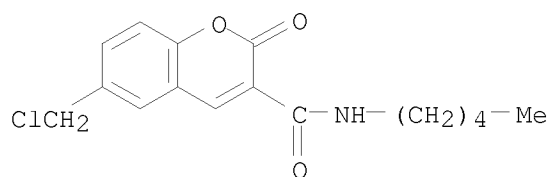
RN 176770-44-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-(1-methylethyl)-2-oxo-  
(CA INDEX NAME)



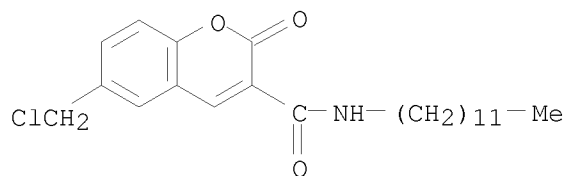
RN 176770-45-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-pentyl- (CA INDEX NAME)



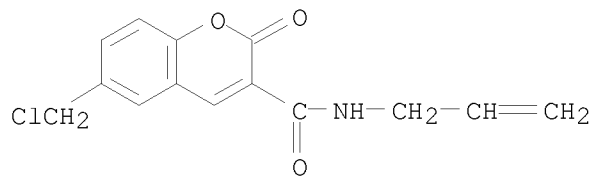
RN 176770-46-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-N-dodecyl-2-oxo- (CA INDEX NAME)



RN 176770-47-1 CAPLUS

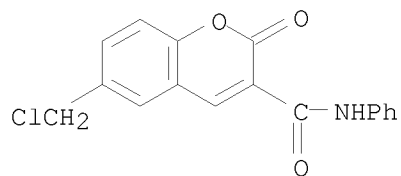
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-2-propen-1-yl-  
(CA INDEX NAME)



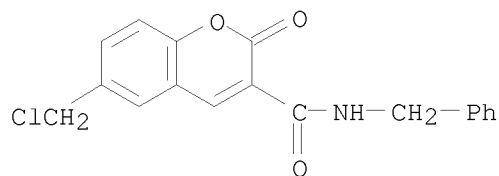
RN 176770-48-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-phenyl- (CA INDEX NAME)

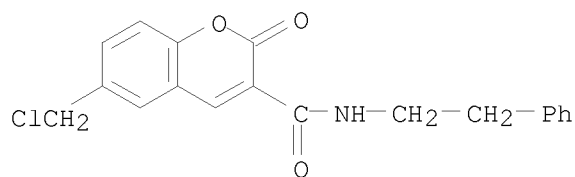
10/513699



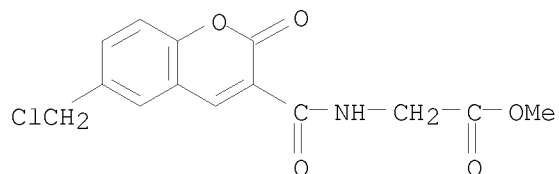
RN 176770-49-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-(phenylmethyl)-  
(CA INDEX NAME)



RN 176770-50-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-(chloromethyl)-2-oxo-N-(2-phenylethyl)-  
(CA INDEX NAME)



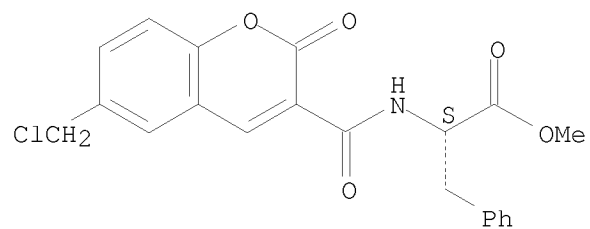
RN 176770-51-7 CAPLUS  
CN Glycine, N-[[6-(chloromethyl)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]-,  
methyl ester (CA INDEX NAME)



RN 176770-52-8 CAPLUS  
CN L-Phenylalanine, N-[[6-(chloromethyl)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]-,  
methyl ester (CA INDEX NAME)

Absolute stereochemistry.

10/513699



OS.CITING REF COUNT: 62 THERE ARE 62 CAPLUS RECORDS THAT CITE THIS  
RECORD (63 CITINGS)

L9 ANSWER 132 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:296286 CAPLUS

DOCUMENT NUMBER: 125:33354

ORIGINAL REFERENCE NO.: 125:6512h,6513a

TITLE: Synthesis of 7-(coumarin-3-formamido)-3-[1-(un)substituted pyridiniummethyl]cephalosporin

AUTHOR(S): Xu, Lian; Duan, Tinghan; Li, Minghua

CORPORATE SOURCE: Jiangsu Medical Univ. for Staff, Nanjing, 210029, Peop. Rep. China

SOURCE: Zhongguo Yaoxue Zazhi (Beijing) (1996), 31(1), 41-2

CODEN: ZYZAEU; ISSN: 1001-2494

PUBLISHER: Zhongguo Yaoxuehui

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB 7-(Couramin-3-formamido)cephalosporin was reacted with pyridine and  $\beta$ -methylpyridine in the presence of NaI or KSCN. The products were isolated by macroporous resin and sephadex column chromatog. Two new cephalosporins were obtained and their structures confirmed by IR, elemental anal. and HNMR. An in vitro antibacterial test showed that these compds. were actively against Gram-pos. bacteria. The addition of large quantity of NaI shortened the reaction time, and the macroporous resin effectively isolated cephalosporin from impurities.

IT 177739-93-4P 177739-94-5P

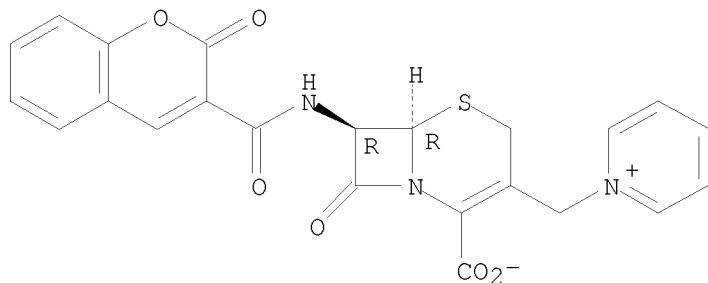
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis of 7-(coumarin-3-formamido)-3-(pyridiniummethyl)cephalosporin)

RN 177739-93-4 CAPLUS

CN Pyridinium, 1-[[2-carboxy-8-oxo-7-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-, inner salt, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

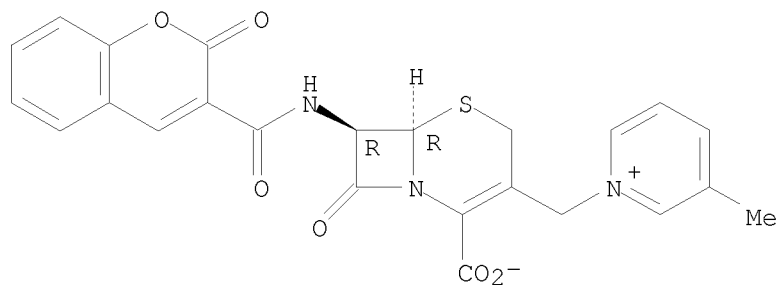


RN 177739-94-5 CAPLUS

CN Pyridinium, 1-[[2-carboxy-8-oxo-7-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-5-thia-1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-3-methyl-, inner salt, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



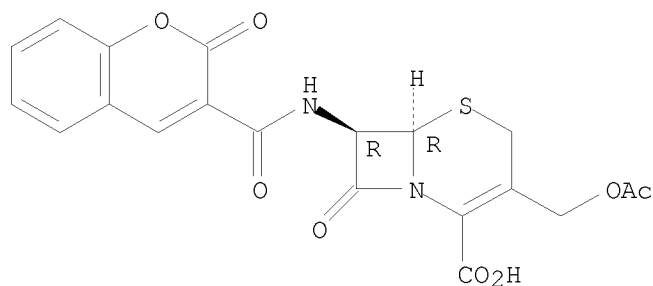
IT 177739-92-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis of 7-(coumarin-3-formamido)-3-(pyridiniummethyl)cephalosporin)

RN 177739-92-3 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, monosodium salt, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na



L9 ANSWER 133 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:228504 CAPLUS

DOCUMENT NUMBER: 124:261362

ORIGINAL REFERENCE NO.: 124:48435a, 48438a

TITLE: Preparation and osteogenesis stimulation by phosphonic acid compounds

INVENTOR(S): Sohda, Takashi; Taketomi, Shigehisa; Oda, Tsuneo

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

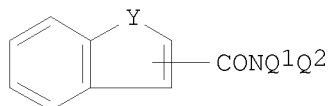
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9601267	A1	19960118	WO 1995-JP1328	19950703 <--
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2191980	A1	19960118	CA 1995-2191980	19950703 <--
AU 9528084	A	19960125	AU 1995-28084	19950703 <--
EP 769015	A1	19970423	EP 1995-923575	19950703 <--
EP 769015	B1	20010314		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1151744	A	19970611	CN 1995-193981	19950703 <--
AT 199721	T	20010315	AT 1995-923575	19950703 <--
JP 08073476	A	19960319	JP 1995-168892	19950704 <--
US 5716944	A	19980210	US 1995-501022	19950811 <--
PRIORITY APPLN. INFO.:			JP 1994-152482	A 19940704
			WO 1995-JP1328	W 19950703

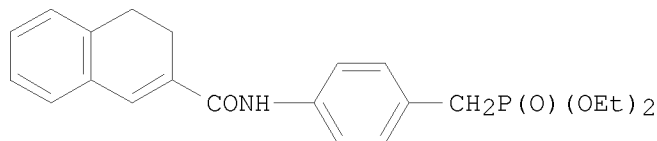
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 124:261362; MARPAT 124:261362

GI



I



II

AB The present invention relates to I or a salt thereof, wherein the

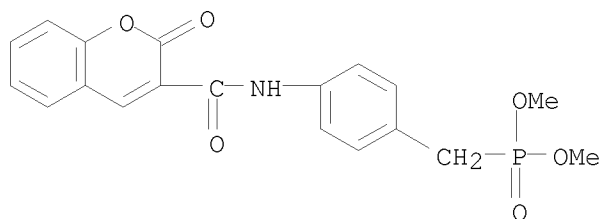
left-hand ring is a benzene ring that may be substituted; Y is a divalent group as a constituent member of the right-hand ring forming a 5- to 8-membered ring; Q1 is  $-X-P(O)(OR1)(OR2)$  wherein X is a bond or a divalent group; R1 and R2, identical or different, are H or a lower alkyl, or may be combined together to form a ring; Q2 is H, a hydrocarbon group that may be substituted or a heterocyclic group that may be substituted; and  $-CONQ1Q2$  is connected to an olefinic C of the right-hand ring. For example, II was prepared in 45% yield from 7-cyclohexyl-3,4-dihydronaphthalene-2-carboxylic acid and di-Et phosphorocyanidate in DMF followed by successive addns. of di-Et 4-aminobenzylphosphonate and Et<sub>3</sub>N. The compds. are useful as prophylactic and therapeutic agents of various metabolic bone diseases such as osteoporosis.

IT 175393-66-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation as osteogenesis promoter)

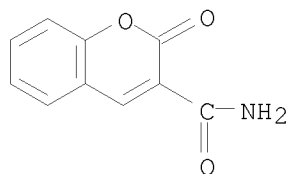
RN 175393-66-5 CAPLUS

CN Phosphonic acid, [[4-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenyl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

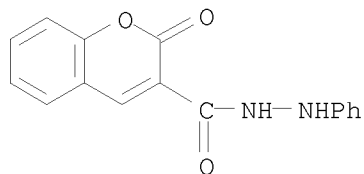


OS.CITING REF COUNT:	12	THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 134 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1996:94722 CAPLUS  
 DOCUMENT NUMBER: 124:260988  
 ORIGINAL REFERENCE NO.: 124:48351a,48354a  
 TITLE: The formation of polyheterocyclic systems by the reaction of 2-oxo-2H-1-benzopyran-3-carboxamide and related compounds with active methylene compounds  
 AUTHOR(S): O'Callaghan, Conor N.; McMurry, T. Brian H.; O'Brien, John E.  
 CORPORATE SOURCE: Univ. Chem. Lab., Trinity Coll., Dublin, Ire.  
 SOURCE: Journal of Chemical Research, Synopses (1995), (12), 490-1  
 CODEN: JRPSDC; ISSN: 0308-2342  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 124:260988  
 AB The reactions of 2-oxo-2H-1-benzopyran-3-carboxamide with Et 3-aminocrotonate and related active methylene compds. yielded a variety of unusual, complex polyheterocyclic structures. The products, derivs. of [1]benzopyrano[3,4-c]pyridine, [1]benzopyrano[3,4-c]azocine and [1]benzopyrano[4,3,2-de][1,6]naphthyridine, were isolated, and their structural assignments confirmed by spectroscopy.  
 IT 1846-78-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of heterocyclic compds. via condensation reactions of oxobenzopyrancarboxamide with active methylene compds.)  
 RN 1846-78-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)

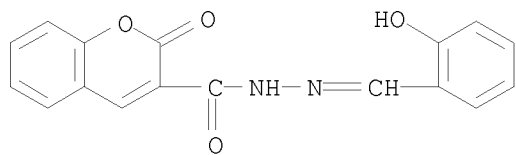


IT 1846-92-0 30866-42-3 30866-44-5,  
 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
 [(4-chlorophenyl)methylene]hydrazide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of heterocyclic compds. via condensation reactions of oxobenzopyrancarboxamides with active methylene compds.)  
 RN 1846-92-0 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX NAME)

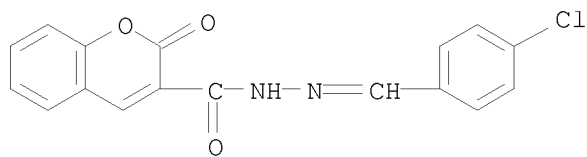


10/513699

RN 30866-42-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(2-hydroxyphenyl)methylene]hydrazide (CA INDEX NAME)



RN 30866-44-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(4-chlorophenyl)methylene]hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

L9 ANSWER 135 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:80423 CAPLUS

DOCUMENT NUMBER: 124:220195

ORIGINAL REFERENCE NO.: 124:40441a

TITLE: N-substituted-2-oxo-(2H)1-benzopyran-3-carboxamide derivatives with analgesic and/or diuretic activities

AUTHOR(S): Artizzu, Nicola; Bonsignore, Leonardo; Loy, Giuseppe; Calignano, Antonio

CORPORATE SOURCE: Dipartimento Farmaco Chimico Tecnologico, Universita di Cagliari, Cagliari, 09124, Italy

SOURCE: Farmaco (1995), 50(12), 853-6

CODEN: FRMCE8

PUBLISHER: Societa Chimica Italiana

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:220195

AB The synthesis of N-substituted-2-oxo-(2H)1-Benzopyran-3-Carboxamide derivs. starting from semicarbazones or thiosemicarbazones and Carbon Suboxide (ratio 1:2) is described. Some compds. showed an interesting analgesic and/or diuretic activity in mice.

IT 174624-83-0P 174624-84-1P 174624-85-2P

174624-86-3P 174624-87-4P 174624-88-5P

174624-89-6P 174624-90-9P

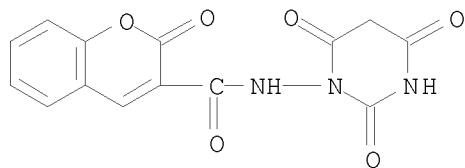
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-substituted oxo-(2H)1-benzopyrancarboxamide derivs. with analgesic and/or diuretic activities)

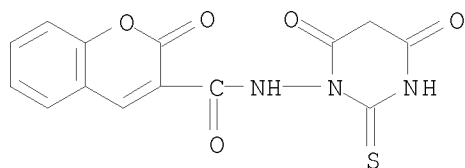
RN 174624-83-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(tetrahydro-2,4,6-trioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



RN 174624-84-1 CAPLUS

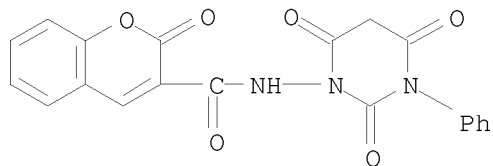
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(tetrahydro-4,6-dioxo-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



RN 174624-85-2 CAPLUS

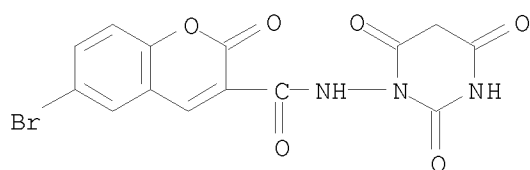
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(tetrahydro-2,4,6-trioxo-3-phenyl-1(2H)-pyrimidinyl)- (CA INDEX NAME)

10/513699



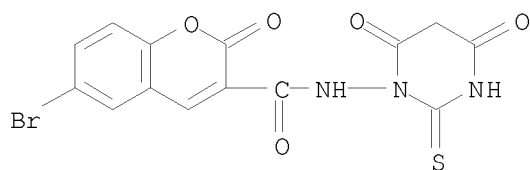
RN 174624-86-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-(tetrahydro-2,4,6-trioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



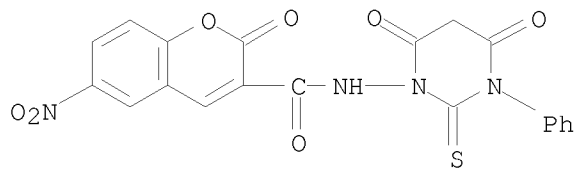
RN 174624-87-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-(tetrahydro-4,6-dioxo-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



RN 174624-88-5 CAPLUS

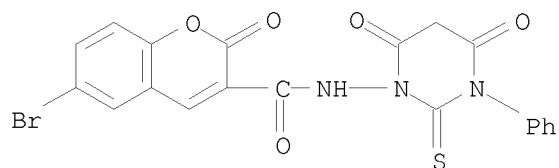
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-(tetrahydro-4,6-dioxo-3-phenyl-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



RN 174624-89-6 CAPLUS

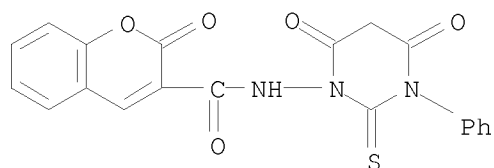
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-(tetrahydro-4,6-dioxo-3-phenyl-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)

10/513699



RN 174624-90-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(tetrahydro-4,6-dioxo-3-phenyl-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



IT 174624-91-0P 174624-92-1P 174624-93-2P

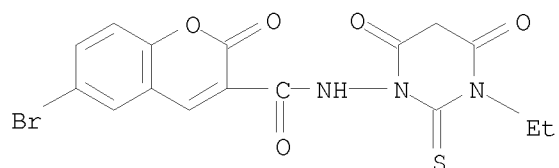
174624-94-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of N-substituted oxo-(2H)1-benzopyrancarboxamide derivs. with analgesic and/or diuretic activities)

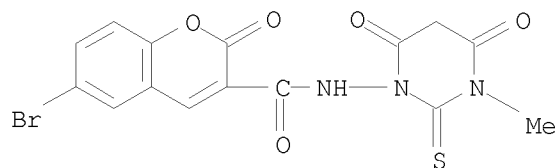
RN 174624-91-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3-ethyltetrahydro-4,6-dioxo-2-thioxo-1(2H)-pyrimidinyl)-2-oxo- (CA INDEX NAME)



RN 174624-92-1 CAPLUS

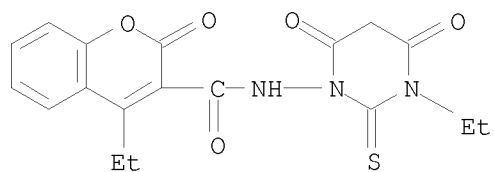
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-(tetrahydro-3-methyl-4,6-dioxo-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



RN 174624-93-2 CAPLUS

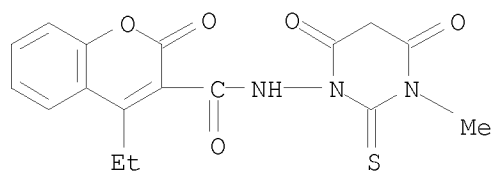
CN 2H-1-Benzopyran-3-carboxamide, 4-ethyl-N-(3-ethyltetrahydro-4,6-dioxo-2-thioxo-1(2H)-pyrimidinyl)-2-oxo- (CA INDEX NAME)

10/513699



RN 174624-94-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-ethyl-2-oxo-N-(tetrahydro-3-methyl-4,6-dioxo-2-thioxo-1(2H)-pyrimidinyl)- (CA INDEX NAME)



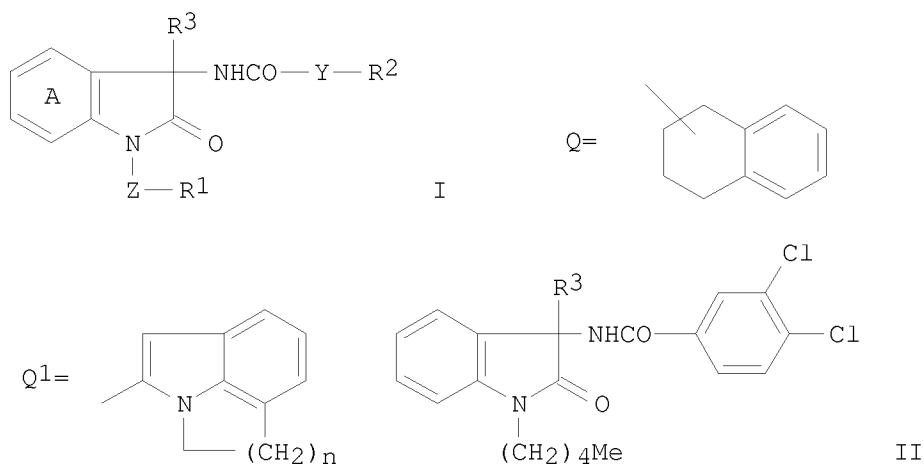
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)



10/513699

L9 ANSWER 136 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1995:858612 CAPLUS  
DOCUMENT NUMBER: 123:285772  
ORIGINAL REFERENCE NO.: 123:51207a,51210a  
TITLE: Preparation of 2-oxoindoline derivatives as  
cholecystokinin antagonists  
INVENTOR(S): Yamada, Koichiro; Hikota, Masataka; Shikano, Toshiro;  
Nagasaki, Masaaki  
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 83 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 9514668	A1	19950601	WO 1994-JP1990	19941125 <--
W: CA, CN, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 07196611	A	19950801	JP 1994-289717	19941124 <--
JP 2949702	B2	19990920		
CA 2177147	A1	19950601	CA 1994-2177147	19941125 <--
CA 2177147	C	20011009		
EP 731091	A1	19960911	EP 1995-901596	19941125 <--
EP 731091	B1	20020102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1136310	A	19961120	CN 1994-194288	19941125 <--
CN 1069314	C	20010808		
AT 211464	T	20020115	AT 1995-901596	19941125 <--
PT 731091	E	20020531	PT 1995-901596	19941125 <--
ES 2173163	T3	20021016	ES 1995-901596	19941125 <--
US 5807883	A	19980915	US 1996-648191	19960524 <--
PRIORITY APPLN. INFO.:			JP 1993-296183 A	19931126
			WO 1994-JP1990 W	19941125
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S):		MARPAT 123:285772		
GI				



AB The title compds. [I; ring A represents (un)substituted benzene; R1 = H, cycloalkyl, aryl, nitrogen heterocycle, oxygen heterocycle, sulfur heterocycle, heterocycle containing N and O, heterocycle containing N and S, lower

alkoxy, CO<sub>2</sub>H, cyano, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, oxiranyl, or 2-(lower alkylthio)-1-hydroxyethyl; R2 = aryl, Q, (un)substituted nitrogenous monocyclic heterocyclyl, (un)substituted nitrogenous bicyclic heterocyclyl, Q1 (wherein n = 1, 2), oxygen heterocyclyl, sulfur heterocyclyl, heterocyclyl containing N and O, heterocyclyl containing N and S; R3 = (un)substituted lower alkyl; Z = a single bond or lower alkylene; Y = a single bond, lower alkylene or alkenylene], useful for the treatment of pancreas disorders such as acute and chronic pancreatitis and pancreas cancer, diseases of stomach and intestines such as irritable bowel syndrome, reflux esophagitis non-ulcer dyspepsia, and biliary colics (no data), are prepared Thus, 2.84 g 3-amino-1-pentyl-2,3-dihydro-1H-indol-2-one hydrochloride was condensed with 2.80 g 3,4-dichlorobenzoyl chloride in the presence of NaHCO<sub>3</sub> in H<sub>2</sub>O/CHCl<sub>3</sub> under ice-cooling for 30 min and at room temperature for 30 min to give 4.06 g intermediate (II; R3 = H). The latter compound (3.56 g) was stirred overnight with 4.1 mL Me acrylate in the presence of K<sub>2</sub>CO<sub>3</sub> in acetone to give 3.96 g title compound II (R3 = CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>Me). A total of 184 I were prepared

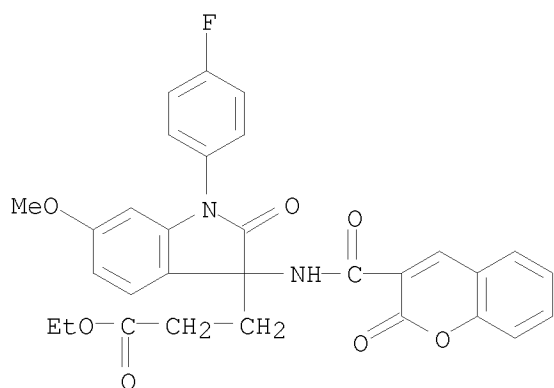
IT 169041-54-7P 169042-52-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of oxoindoline derivs. as cholecystokinin antagonists)

RN 169041-54-7 CAPLUS

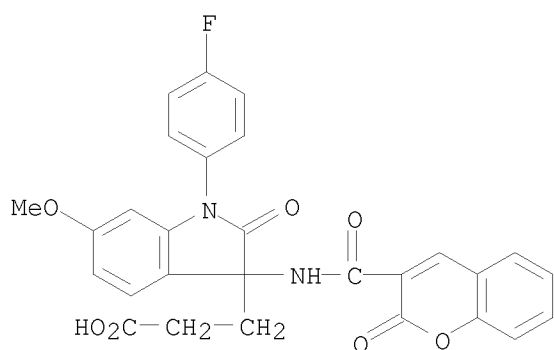
CN 1H-Indole-3-propanoic acid, 1-(4-fluorophenyl)-2,3-dihydro-6-methoxy-2-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)

10/513699



RN 169042-52-8 CAPLUS

CN 1H-Indole-3-propanoic acid, 1-(4-fluorophenyl)-2,3-dihydro-6-methoxy-2-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

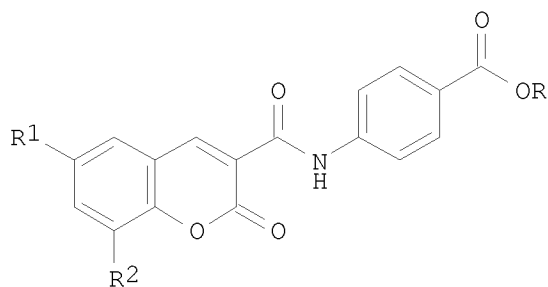
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 137 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1995:416400 CAPLUS  
DOCUMENT NUMBER: 122:187399  
ORIGINAL REFERENCE NO.: 122:34327a,34330a  
TITLE: Preparation of  
N-(4-alkoxycarbonylphenyl)coumarin-3-carboxamides as  
UV absorbers  
INVENTOR(S): Ogiso, Akira; Misawa, Tsutami; Imai, Rihoko; Itoh,  
Hisato  
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan  
SOURCE: Eur. Pat. Appl., 18 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 635504	A1	19950125	EP 1994-111307	19940720 <--
R: DE, FR, GB				
JP 07082262	A	19950328	JP 1994-155539	19940707 <--
JP 3556970	B2	20040825		
US 5482986	A	19960109	US 1994-272829	19940711 <--
PRIORITY APPLN. INFO.:			JP 1993-181098	A 19930722
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S):	MARPAT	122:187399		

GI



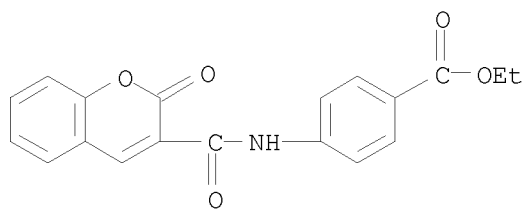
AB Title compds. (I; R = H, C1-8 alkyl, alkoxyalkyl; R1,R2 = H or halo) were prepared for use in thermoplastic resins. Thus, coumarin-3-carboxylic acid was amidated by 4-(H2N)C6H4CO3Et to give I (R = Et, R1 = R2 = H). The latter, at 100 parts in 10,000 parts polyethylene terephthalate, gave transmittance of 0.0 and 1.1% at 370 and 380nm, resp., in a 102 $\mu$ m sheet.

IT 111947-24-1P 161559-21-3P  
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(preparation of N-(4-alkoxycarbonylphenyl)coumarin-3-carboxamides as UV absorbers)

RN 111947-24-1 CAPLUS

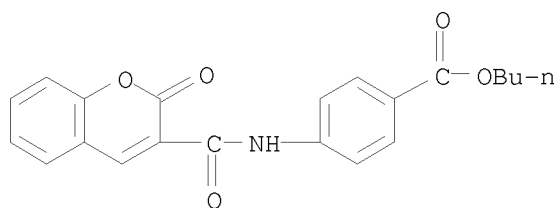
10/513699

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



RN 161559-21-3 CAPLUS

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, butyl ester (CA INDEX NAME)

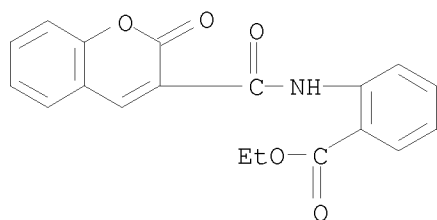


IT 150711-90-3P 161559-22-4P

RL: PNU (Preparation, unclassified); PREP (Preparation)  
(preparation of N-(4-alkoxycarbonylphenyl)coumarin-3-carboxamides as UV absorbers)

RN 150711-90-3 CAPLUS

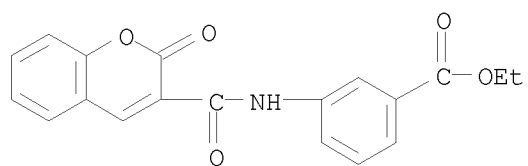
CN Benzoic acid, 2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



RN 161559-22-4 CAPLUS

CN Benzoic acid, 3-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)

10/513699

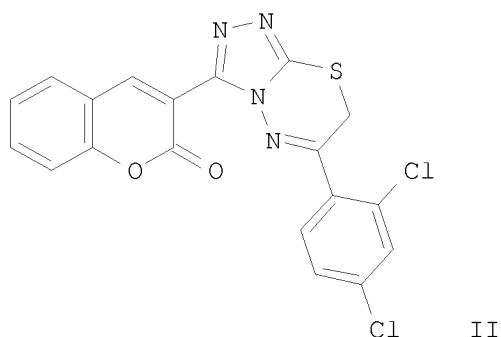
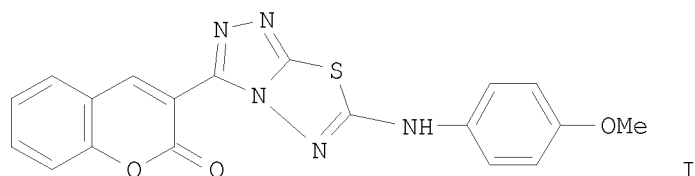


<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 138 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1995:239262 CAPLUS  
DOCUMENT NUMBER: 122:45689  
ORIGINAL REFERENCE NO.: 122:8537a,8540a  
TITLE: Benzopyran-2-one derivatives: antiinflammatory,  
analgesic and antiproteolytic agents  
AUTHOR(S): Bhalla, M.; Hitkari, A.; Gujrati, V. R.; Bhalla, T.  
N.; Shanker, K.  
CORPORATE SOURCE: Dep. Pharmacol. and Therapeutics, KG's Med. Coll.,  
Lucknow, 226 003, India  
SOURCE: European Journal of Medicinal Chemistry (1994  
, 29(9), 713-17  
CODEN: EJMCA5; ISSN: 0223-5234  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

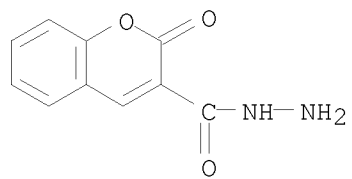


AB Several benzopyranotriazoles were prepared and tested for anti-inflammatory, analgesic, and antiproteolytic activity. I and II showed anti-inflammatory activity without ulcerogenic adverse side effects. Structure-activity relations are discussed.

IT 1846-91-9P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(antiinflammatory, analgesic, and antiproteolytic of benzopyranone derivs. and structure-activity)

RN 1846-91-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 9

THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD  
(9 CITINGS)

<12/04/2007>

Erich Leese



L9 ANSWER 139 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1995:200415 CAPLUS  
 DOCUMENT NUMBER: 122:75477  
 ORIGINAL REFERENCE NO.: 122:14227a,14230a  
 TITLE: Peroxidatively active substance (PAS) determination  
 with PAS-cleavable fluorescer-quencher conjugates  
 INVENTOR(S): Ullman, Edwin F.  
 PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA  
 SOURCE: U.S., 26 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5332662	A	19940726	US 1992-923080	19920731 <--
US 5445944	A	19950829	US 1994-231079	19940422 <--
PRIORITY APPLN. INFO.:			US 1992-923080	A1 19920731

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 122:75477

AB The method for PAS determination comprises detecting a fluorescent signal produced

upon cleavage of a compound of the formula F-L-Q (F = a fluorescer capable of producing the signal; Q = quencher capable of quenching the signal when linked to F; L = a bond, or a linking group having a bond, wherein the bond is capable of being cleaved by a reaction of the PAS with a substrate of the PAS and a hydrogen donor) wherein the cleavage substantially reduces the quenching. The PAS may be a complexed transition metal ion, hemes, hemoproteins, and peroxidases. The preparation of acridine and acridone conjugates with N,N-dimethylaniline and with phenol was described. Use of such F-L-Q compds. in peroxidase determination was demonstrated.

Dicarboxidine or

dicarboxidinell were used as hydrogen donor in these assays.

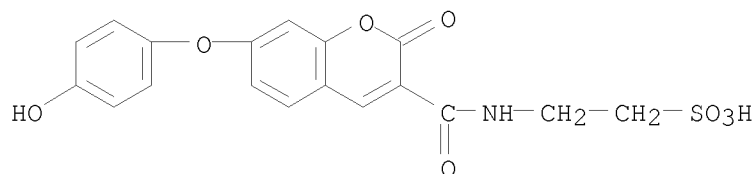
IT 159146-77-7

RL: ANST (Analytical study)

(substrate for peroxidase fluorometric determination)

RN 159146-77-7 CAPLUS

CN Ethanesulfonic acid, 2-[[[7-(4-hydroxyphenoxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)  
 REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 140 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:32622 CAPLUS

DOCUMENT NUMBER: 122:31918

ORIGINAL REFERENCE NO.: 122:6311a,6314a

TITLE: Structure-activity relationships of double-strand RGD peptides as GPIIb/IIIa receptor antagonists

AUTHOR(S): Ojima, Iwao; Dong, Qing; Eguchi, Masakatsu; Oh, Young-im; Amann, Clare M.; Collier, Barry S.

CORPORATE SOURCE: School. Medicine, State University New York, Stony Brook, NY, 11794, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (1994), 4(14), 1749-54

CODEN: BMCLE8; ISSN: 0960-894X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of new double-strand RGD peptides M(CO-Arg-Gly-Asp-Phe-OH)<sub>2</sub> [M = (CH<sub>2</sub>)<sub>n</sub>, p-C<sub>6</sub>H<sub>4</sub>, n = 2-4] and (R-Arg-Gly-Asp-Phe-NH)<sub>2</sub>XZ [R = H, Me(CH<sub>2</sub>)<sub>4</sub>CO, Bz, 4-[HN:C(NH<sub>2</sub>)NH]C<sub>6</sub>H<sub>4</sub>CO-Ser; X = Lys, Orn, cis,cis-3,5-diaminocyclohexanecarbonyl, 3,5-(Gly-NH)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CO; Z = NH<sub>2</sub>, Gly-Arg-Gly-Asp-Phe-NH<sub>2</sub>, Arg-Gly-Asp-Phe-OH] were prepared and their inhibitory activities evaluated for platelet aggregation. Substantial improvement in activity is observed with these novel RGD peptides in comparison with single-strand RGD peptides. The structure-activity relationships of these double-strand RGD peptides are discussed.

IT 159581-66-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and blood platelet aggregation inhibitory activity of)

RN 159581-66-5 CAPLUS

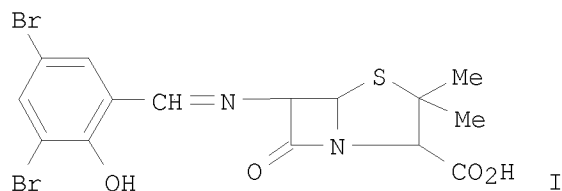
CN L-Lysinamide, N<sub>2</sub>-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-arginylglycyl-L- $\alpha$ -aspartyl-L-phenylalanyl-L-prolyl-N<sub>6</sub>-[1-[N-[N-[N-[N<sub>2</sub>-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-arginyl]glycyl]-L- $\alpha$ -aspartyl]-L-phenylalanyl]-L-prolyl]- (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

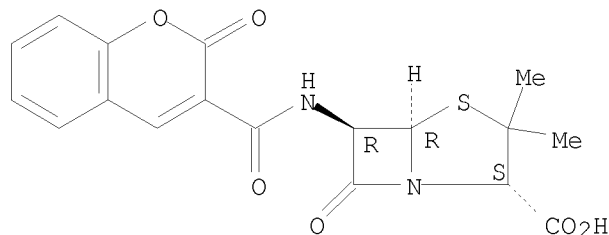
10/513699

L9 ANSWER 141 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1994:630521 CAPLUS  
DOCUMENT NUMBER: 121:230521  
ORIGINAL REFERENCE NO.: 121:42030h,42031a  
TITLE: Synthesis and antimicrobial activity of coumarin and  
benzodioxazepine-, diazepine- and  
benzoxazepine-substituted penicillins  
AUTHOR(S): Bonsignore, L.; De Logu, A.; Loy, G.; Lavagna, S. M.;  
Secci, D.  
CORPORATE SOURCE: Dipartimento Farmaco Chimico Tecnologico, Univ.  
Cagliari, Cagliari, 09124, Italy  
SOURCE: European Journal of Medicinal Chemistry (1994  
, 29(6), 479-85  
CODEN: EJMCA5; ISSN: 0223-5234  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB Some semisynthetic penicillins 6-substituted with benzo-condensed  
heterocyclic derivs. were prepared using the reaction of carbon suboxide  
with Schiff bases and disubstituted benzoic acids. The microbiol. assay  
performed with the penicillins and their intermediates showed a good  
activity for the Schiff base I and a weak activity for the other compds.  
IT 158198-12-0P 158198-17-5P 158198-19-7P  
158198-20-0P 158198-22-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and bactericidal activity of condensed heterocycle-substituted  
penicillins)  
RN 158198-12-0 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[ (2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-,  
[2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

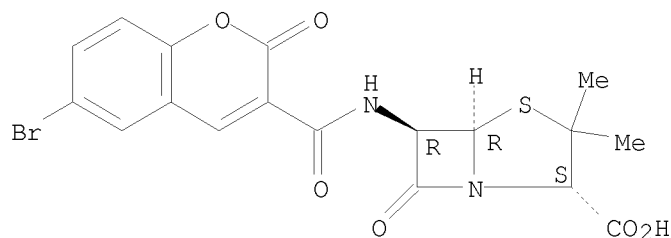
Absolute stereochemistry.



10/513699

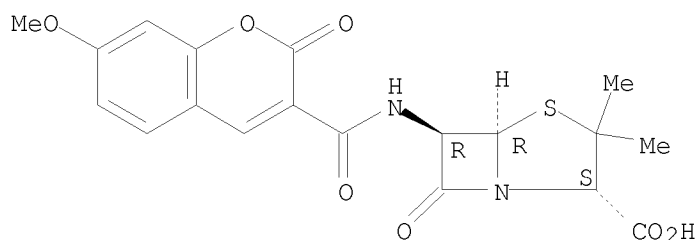
RN 158198-17-5 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3,3-dimethyl-7-oxo-  
, [2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



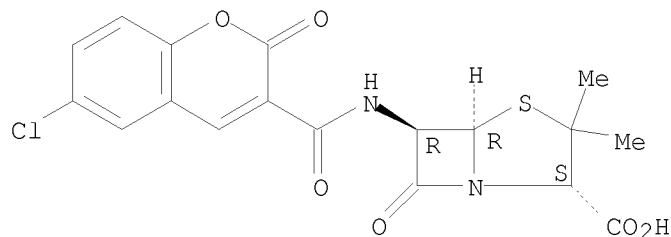
RN 158198-19-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3,3-dimethyl-7-oxo-  
, [2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 158198-20-0 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[ (6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3,3-dimethyl-7-oxo-  
, [2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

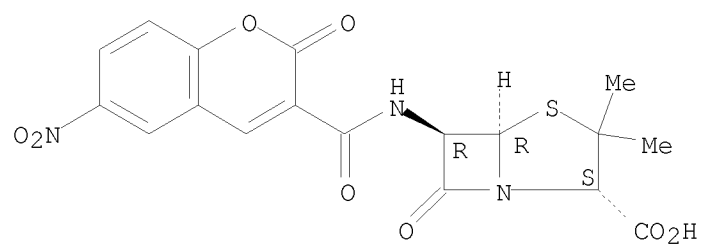
Absolute stereochemistry.



RN 158198-22-2 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[ (6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-7-oxo-  
, [2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

10/513699

Absolute stereochemistry.



OS.CITING REF COUNT:        15        THERE ARE 15 CAPLUS RECORDS THAT CITE THIS  
RECORD (15 CITINGS)

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 142 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1994:557526 CAPLUS  
DOCUMENT NUMBER: 121:157526  
ORIGINAL REFERENCE NO.: 121:28520h,28521a  
TITLE: Preparation of benzopyranone and benzothiopyranone  
derivatives as UV-absorbents, thermoplastic resin  
compositions containing them, and moldings  
INVENTOR(S): Ogiso, Akira; Misawa, Tsutayoshi; Imai, Rihoko; Ito,  
Naoto  
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 06145164	A	19940524	JP 1992-295045	19921104 <--
PRIORITY APPLN. INFO.:			JP 1992-295045	19921104
OTHER SOURCE(S):	MARPAT	121:157526		

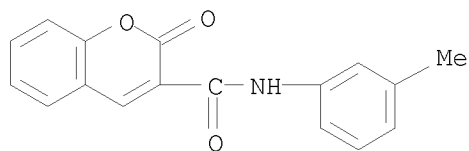
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. (I; Y1 = O, S; X1 - X4 = H, halo, NO2, OH, AcO; Q1 - Q5 = H, halo, NO2, cyano; excluding the case where all Q1 - Q5 = H; Q6 - Q15 = H, halo, NO2, cyano) and (II; Y1, X1 - X4 = same as above; Q6 - Q15 = H, halo, NO2, cyano), having excellent thermal stability with little sublimation, are prepared A thermoplastic resin composition or a thermoplastic molding thereof contains  $\geq 0.001$  weight part UV-absorbent I or II. The thermoplastic resin is preferably a polyester. Thus, 340 part coumarin-3-carboxylic acid was dissolved in 3,600 part N,N-dimethylimidazolidinone at 25° and cooled to 5° followed by adding 215 part SOCl2 at  $\leq 15^\circ$  to give a solution containing coumarin-3-carbonyl chloride, to which was added 296 part p-nitroaniline and the resulting solution was heated at 140° for 3 h to give coumarin-3-carboxamide derivative (III). III (100 part) was dissolved in 10,000 polyethylene terephthalate melt at 280° and the resulting melt was extruded to give a sheet of 200  $\mu\text{m}$  thickness which was subjected to fixed-width uniaxial extension to give a film of 108  $\mu\text{m}$  thickness; this film blocked 100% UV light at 380nm and no coloration of the film was observed

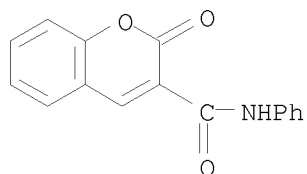
IT 1846-99-7P 54396-25-7P 157309-57-4P  
157309-58-5P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as UV-absorber for thermoplastic resins)  
RN 1846-99-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)

10/513699



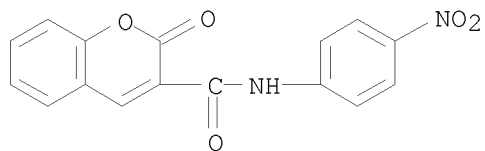
RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



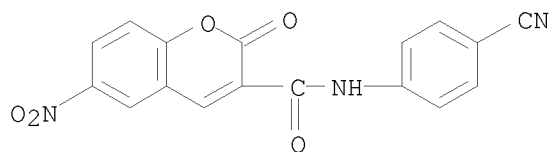
RN 157309-57-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-nitrophenyl)-2-oxo- (CA INDEX NAME)



RN 157309-58-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-cyanophenyl)-6-nitro-2-oxo- (CA INDEX NAME)

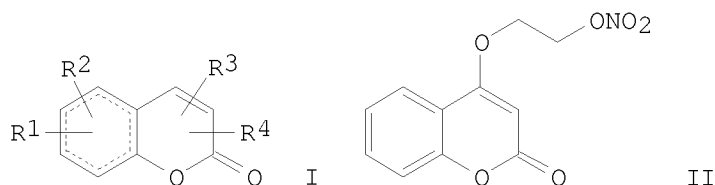


OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 143 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1994:533969 CAPLUS  
 DOCUMENT NUMBER: 121:133969  
 ORIGINAL REFERENCE NO.: 121:24217a,24220a  
 TITLE: nitroxy coumarin compounds with pharmaceutical properties  
 INVENTOR(S): Broekhoven, Mark A.; Bron, Jan; Van Loenen, Astrid H. M.; Sterk, Geert Jan; Timmerman, Hendrik; Veerman, Meta E. J.; Van Der, Werf Jan Fetze  
 PATENT ASSIGNEE(S): Neth.  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9412488	A1	19940609	WO 1993-EP3278	19931123 <--
W: AU, BG, BY, CA, CZ, DE, FI, HU, JP, KR, LV, NO, NZ, PL, RO, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9456264	A	19940622	AU 1994-56264	19931123 <--
EP 670833	A1	19950913	EP 1994-901849	19931123 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08503484	T	19960416	JP 1993-512745	19931123 <--
PRIORITY APPLN. INFO.:			CH 1992-3636	A 19921127
			WO 1993-EP3278	W 19931123
OTHER SOURCE(S):		MARPAT 121:133969		
GI				

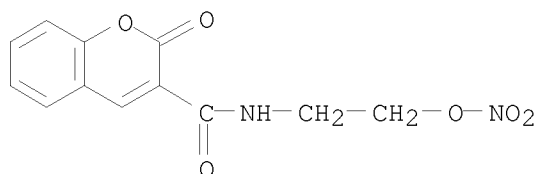


AB The invention concerns compds. I [R1-R4 = substituents on any of positions 3-8, where R1 = Y(CH2)mA(CH2)nONO2; R2 = H, alkyl, Y(CH2)mA(CH2)nONO2; R3 = H, alkyl, alkoxy, alkoxyalkyl, alkylcarbonyl, alkylcarbonyloxy, alkylcarbonylalkyl, CO2H, carboxyalkyl, alkoxycarbonyl, Ph, phenylalkyl, phenylalkoxy, halo, CF3, cyano; R4 = H, alkyl; Y = O, CO2, CONH; m = n = 0 and A = alkylene; or m = n = 1 and A = cyclohexylene; or m = n = 2 and A = O or OCH2CH2O] (16 examples prepared). I are useful for treatment of cardiovascular conditions as well as high intraocular pressure. Thus, hydroxyethylation of 4-hydroxycoumarin by ethylene carbonate and Et4N+Br- at 160° gave 60% 4-(2-hydroxyethoxy)coumarin, which reacted with HNO3 and Ac2O in AcOH-EtOAc mixture to give nitrate ester II. A blood pressure reduction of 30% with a heart rate increase of only 2.1% was obtained in narcotized rabbits after administration of II (amount and route unspecified). II also had an EC50 of 0.0004 μM for relaxation of



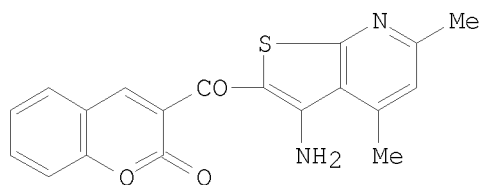
10/513699

isolated rat aorta.  
IT 157101-65-0P, 3-(2-Nitroxyethylaminocarbonyl)coumarin  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as cardiovascular and antiglaucoma agent)  
RN 157101-65-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(nitrooxy)ethyl]-2-oxo- (CA INDEX  
NAME)



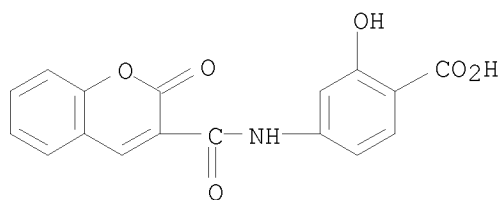
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 144 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1994:482963 CAPLUS  
 DOCUMENT NUMBER: 121:82963  
 ORIGINAL REFERENCE NO.: 121:14901a,14904a  
 TITLE: Reactions of benzopyran-2-one-3-carbonyl derivatives  
 with nucleophilic reagents  
 AUTHOR(S): El-Agrody, A. M.; Selim, M. R.; Aly, F. M.;  
 Abu-Shanab, F. A.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Nasr, Egypt  
 SOURCE: Pakistan Journal of Scientific and Industrial Research  
 (1993), 36(5), 175-8  
 CODEN: PSIRAA; ISSN: 0030-9885  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



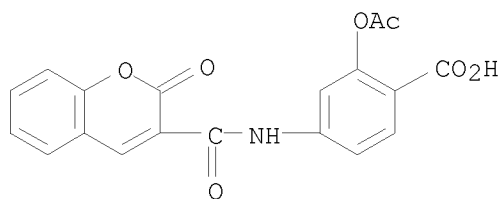
I

AB Several benzopyran-2-one-3-carboxamides have been prepared by the  
 condensation of coumarin-3-carbonyl chloride with various nucleophilic  
 reagents. The reaction of 3-carbethoxycoumarin with o-phenylenediamine  
 and o-aminophenol gave 3-(benzimidazolyl)- and 3-(benzoxazolyl)coumarins.  
 The reaction of 3-(bromoacetyl)coumarin with  
 3-cyano-4,6-dimethylpyridine-2-thiol in the presence of K<sub>2</sub>CO<sub>3</sub> gave I.  
 IT 156172-93-9P 156172-94-0P 156172-95-1P  
 156172-96-2P 156172-97-3P 156173-00-1P  
 156173-02-3P 156173-03-4P 156173-05-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 156172-93-9 CAPLUS  
 CN Benzoic acid, 2-hydroxy-4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
 (CA INDEX NAME)



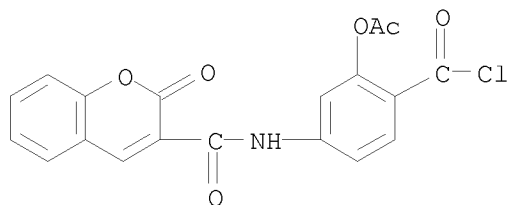
RN 156172-94-0 CAPLUS  
 CN Benzoic acid, 2-(acetyloxy)-4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)

10/513699



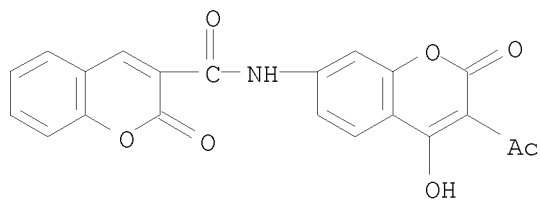
RN 156172-95-1 CAPLUS

CN Benzoyl chloride, 2-(acetyloxy)-4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



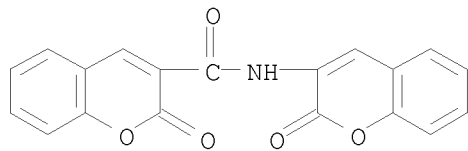
RN 156172-96-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-acetyl-4-hydroxy-2-oxo-2H-1-benzopyran-7-yl)-2-oxo- (CA INDEX NAME)



RN 156172-97-3 CAPLUS

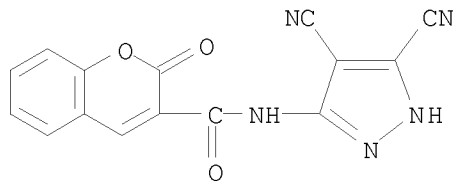
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-oxo-2H-1-benzopyran-3-yl)- (CA INDEX NAME)



RN 156173-00-1 CAPLUS

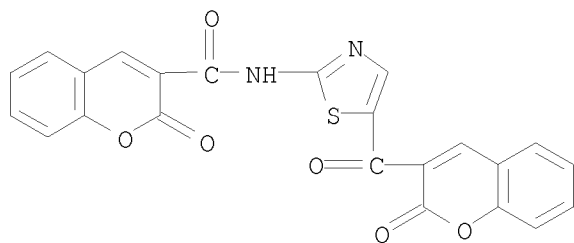
CN 2H-1-Benzopyran-3-carboxamide, N-(4,5-dicyano-1H-pyrazol-3-yl)-2-oxo- (CA INDEX NAME)

10/513699



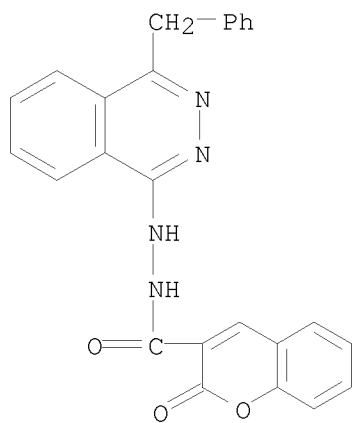
RN 156173-02-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[5-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-2-thiazolyl]- (CA INDEX NAME)



RN 156173-03-4 CAPLUS

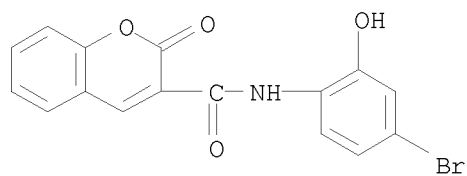
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-[4-(phenylmethyl)-1-phthalazinyl]hydrazide (CA INDEX NAME)



RN 156173-05-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-2-hydroxyphenyl)-2-oxo- (CA INDEX NAME)

10/513699

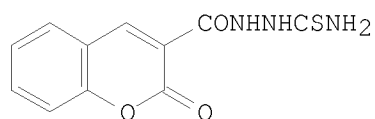


OS.CITING REF COUNT: 2

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

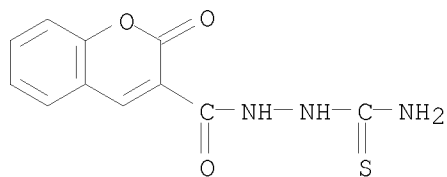
10/513699

L9 ANSWER 145 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1994:457398 CAPLUS  
DOCUMENT NUMBER: 121:57398  
ORIGINAL REFERENCE NO.: 121:10353a,10356a  
TITLE: Coumarin derivatives. Part I. Synthesis of some  
thiadiazolyl, oxadiazolyl and triazolyl coumarins of  
biological interest  
AUTHOR(S): Badran, M. M.; Ismail, M. Mohsen; Ismail, M. Abdel  
Hamid; El-Hakeem, M. A.  
CORPORATE SOURCE: Fac. Pharm., Cairo Univ., Cairo, Egypt  
SOURCE: Egyptian Journal of Pharmaceutical Sciences ( 1992), 33(5-6), 1063-79  
CODEN: EJPSBZ; ISSN: 0301-5068  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



I

AB The title compds. were prepared by reaction of thiosemicarbazide I with NaOH,  $\text{H}_3\text{PO}_4$ , or dicyclohexylcarbodiimide. The products were then reacted with alkyl halides, acyl chlorides, and aromatic aldehydes. Marginal antifungal activity was found.  
IT 156177-01-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization reactions of)  
RN 156177-01-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(aminothioxomethyl)hydrazide (CA INDEX NAME)



L9 ANSWER 146 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:457274 CAPLUS

DOCUMENT NUMBER: 121:57274

ORIGINAL REFERENCE NO.: 121:10325a,10328a

TITLE: Reactions of methyl derivatives of 2-penten-5-olide, 2-buten-4-olide, and coumarin with dicarboxylic anhydrides and with 3-formylchromones under the Perkin synthesis conditions

AUTHOR(S): Melikyan, G. S.; Lacova, M.; Kralova, K.; El-Shaaer, H. M.; Henselova, M.; Avetisyan, A. A.

CORPORATE SOURCE: Fac. Chem., Yerevan State Univ., Yerevan, 375 049, Armenia

SOURCE: Chemical Papers (1993), 47(6), 388-92

CODEN: CHPAEG; ISSN: 0366-6352

DOCUMENT TYPE: Journal

LANGUAGE: English

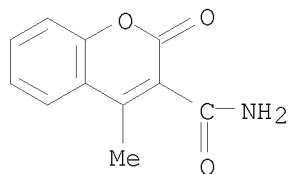
AB 4H-4-Oxo-3-(R-vinylene)chromene derivs. and 3-(R-methylene)phthalide derivs. have been prepared by condensation reactions (R = 2H, 5H-2-oxo-5,5-dimethyl-3-R5-4-furyl; 2H-2-oxo-6,6-dimethyl-3-R5-5,6-dihydropyran-4-yl; 2H-2-oxo-3-R5-4-chromenyl; R5 = CN, CONH2, CO2C2H5, benzothiazolyl). Some of the prepared compds. were tested for a variety of biol. activities (for herbicidal, fungicidal, growth-regulating activity, for antifungal activity against human pathogenic dermatophytes and micromycetes, and also for their possible anti-HIV activity).

IT 24526-68-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation reactions of, under Perkin synthesis conditions)

RN 24526-68-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-methyl-2-oxo- (CA INDEX NAME)



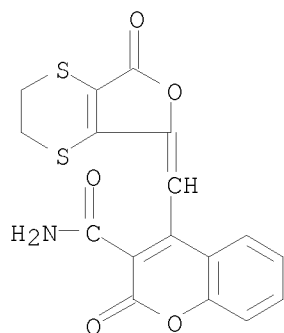
IT 156329-29-2P 156329-58-7P 156329-59-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and biol. activity of)

RN 156329-29-2 CAPLUS

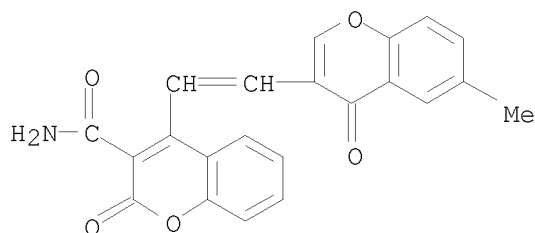
CN 2H-1-Benzopyran-3-carboxamide, 4-[(2,3-dihydro-7-oxo-1,4-dithiino[2,3-c]furan-5(7H)-ylidene)methyl]-2-oxo- (CA INDEX NAME)

10/513699



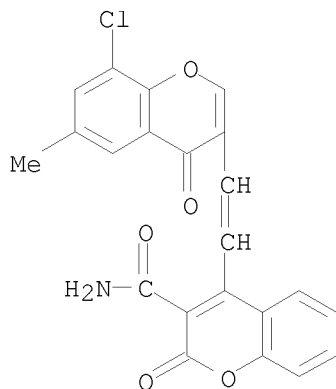
RN 156329-58-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-[2-(6-methyl-4-oxo-4H-1-benzopyran-3-yl)ethenyl]-2-oxo- (CA INDEX NAME)



RN 156329-59-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-[2-(8-chloro-6-methyl-4-oxo-4H-1-benzopyran-3-yl)ethenyl]-2-oxo- (CA INDEX NAME)

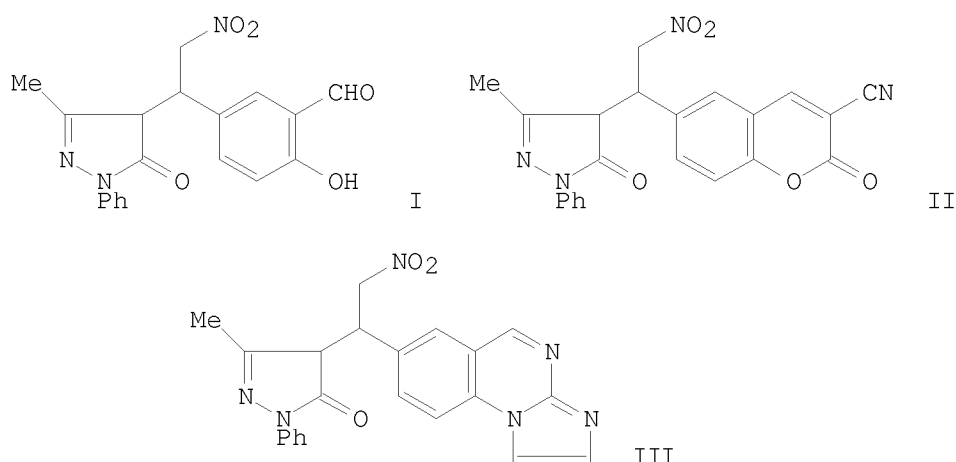


OS.CITING REF COUNT: 4

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)



L9 ANSWER 147 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1994:323359 CAPLUS  
 DOCUMENT NUMBER: 120:323359  
 ORIGINAL REFERENCE NO.: 120:56889a,56892a  
 TITLE: Synthesis of some new antimicrobial 2-pyrazolin-5-ones of pharmaceutical interest  
 AUTHOR(S): El-Ablack, F.Z.; Metwally, M.A.  
 CORPORATE SOURCE: Fac. Sci., Univ. Mansoura, Mansoura, Egypt  
 SOURCE: Pakistan Journal of Scientific and Industrial Research (1993), 36(2-3), 77-79  
 CODEN: PSIRAA; ISSN: 0030-9885  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



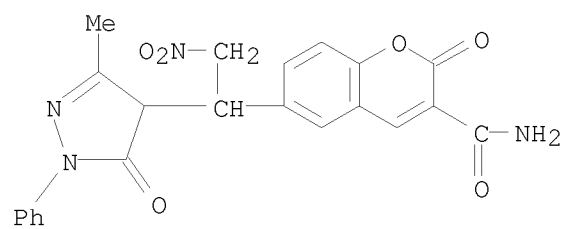
AB The [methylphenyloxopyrazolinyl(nitromethyl)methyl]hydroxybenzaldehyde I was used as a key intermediate in the synthesis of bactericidal and fungicidal heterocyclic derivs., e.g. II and III. Most of the products gave pos. antimicrobial activities.

IT 154920-54-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and antimicrobial activity of)

RN 154920-54-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-[1-(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)-2-nitroethyl]-2-oxo- (CA INDEX NAME)

10/513699



<12/04/2007>

Erich Leese

L9 ANSWER 148 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:289634 CAPLUS

DOCUMENT NUMBER: 120:289634

ORIGINAL REFERENCE NO.: 120:50767a,50770a

TITLE: Search for new antiallergic compounds in the series of coumarin derivatives and study of mechanisms of their action

AUTHOR(S): Saraf, A. S.; Simonyan, A. V.; Oganessian, E. T.

CORPORATE SOURCE: Pharm. Inst., Pyatigorsk, 357533, Russia

SOURCE: Eksperimental'naya i Klinicheskaya Farmakologiya (1993), 56(2), 47-50

CODEN: EKFAE9; ISSN: 0869-2092

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The antiallergic effects of novel synthetic coumarin-3-carboxylic acid derivs. were studied in a rat model of passive cutaneous anaphylaxis. The most potent agent was found and tested for mechanisms of its specific pharmacol. action. Its capacity of suppressing immediate hypersensitivity in various animal species was demonstrated to be due to its concomitant action on the pathochem. and pathophysiol. stages of the allergic process.

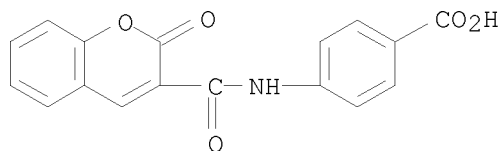
IT 1847-05-8 54396-25-7 57601-45-3  
111947-24-1 139964-77-5 150231-88-2  
150231-89-3

RL: BIOL (Biological study)

(allergy inhibition by and mechanism of action of)

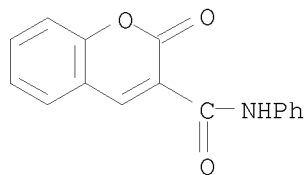
RN 1847-05-8 CAPLUS

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



RN 54396-25-7 CAPLUS

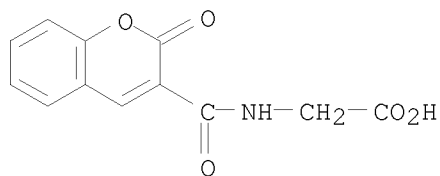
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



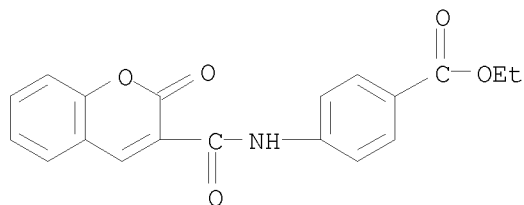
RN 57601-45-3 CAPLUS

CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

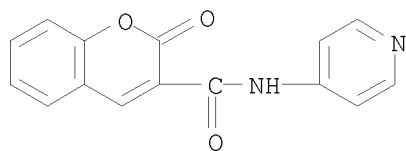
10/513699



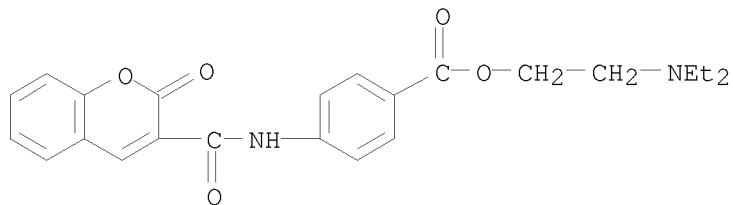
RN 111947-24-1 CAPLUS  
CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



RN 139964-77-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-4-pyridinyl- (CA INDEX NAME)



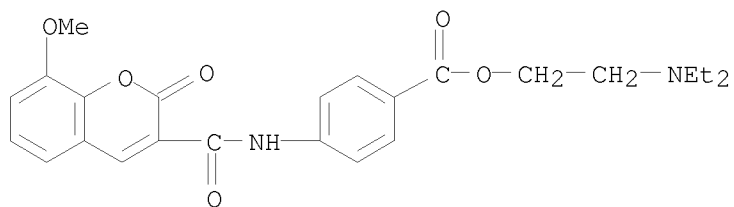
RN 150231-88-2 CAPLUS  
CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester, hydrochloride (1:1) (CA INDEX NAME)



● HCl

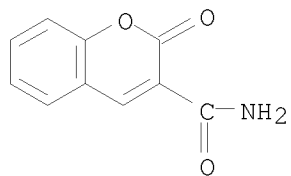
RN 150231-89-3 CAPLUS  
CN Benzoic acid, 4-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester, hydrochloride (1:1) (CA INDEX NAME)

10/513699



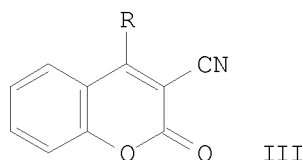
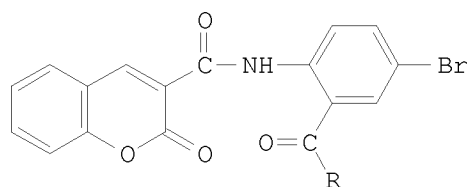
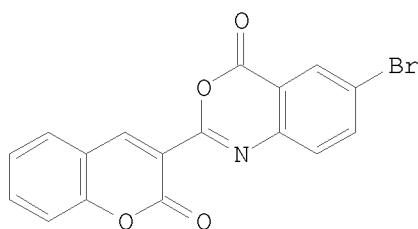
● HCl

IT 1846-78-2D, derivs.  
RL: BIOL (Biological study)  
(allergy inhibition by and mechanism of action of, screening for)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)

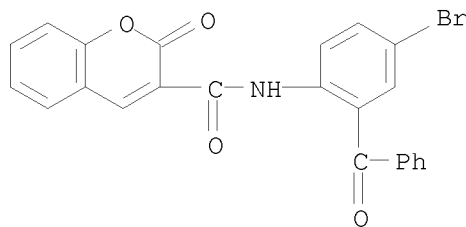


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 149 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1994:244555 CAPLUS  
 DOCUMENT NUMBER: 120:244555  
 ORIGINAL REFERENCE NO.: 120:43337a, 43340a  
 TITLE: The reaction of coumarin derivatives with nucleophilic reagents  
 AUTHOR(S): El-Agrody, A. M.; Bedair, A. H.; Aly, F. M.; Abu-Shanab, F. A.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
 SOURCE: Journal of the Chemical Society of Pakistan ( 1993), 15(4), 261-3  
 CODEN: JCSPDF; ISSN: 0253-5106  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 120:244555  
 GI



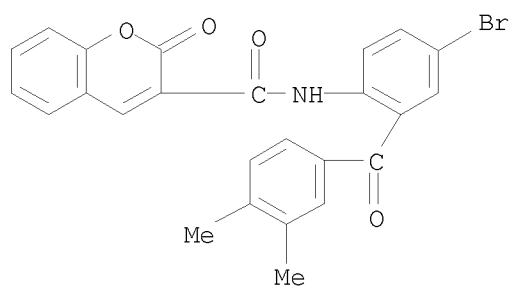
AB Friedel-Crafts reaction of coumarin I with PhH and PhMe gave 65-75% II (R = Ph, 3,4-dimethylphenyl, resp.). Also, the reaction of 3-cyanocoumarin with Grignard reagents, RMgX gave 73-9% III (R = Et, p-tolyl).  
 IT 154267-55-7P 154267-56-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 154267-55-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(2-benzoyl-4-bromophenyl)-2-oxo- (CA INDEX NAME)



10/513699

RN 154267-56-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-bromo-2-(3,4-dimethylbenzoyl)phenyl]-2-oxo- (CA INDEX NAME)

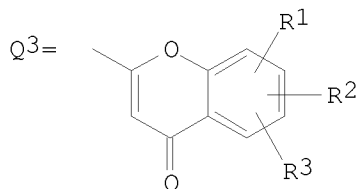
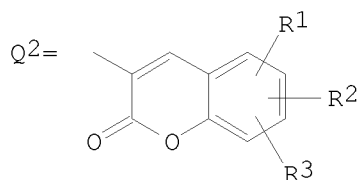
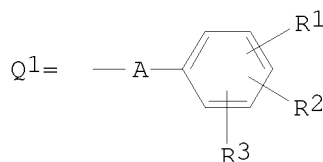
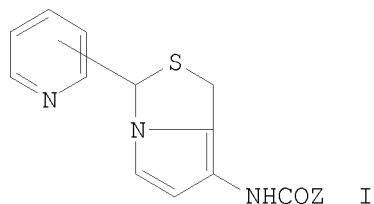


<12/04/2007>

Erich Leese

L9 ANSWER 150 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1994:217660 CAPLUS  
 DOCUMENT NUMBER: 120:217660  
 ORIGINAL REFERENCE NO.: 120:38657a,38660a  
 TITLE: Preparation of pyrrolothiazoles as pharmaceuticals  
 INVENTOR(S): Nagaoka, Hitoshi; Shishikura, Junichi; Tomioka, Kenichi; Mase, Toshasu  
 PATENT ASSIGNEE(S): Yamanouchi Pharma Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05230069	A	19930907	JP 1992-70152	19920220 <--
PRIORITY APPLN. INFO.:			JP 1992-70152	19920220
OTHER SOURCE(S):	MARPAT 120:217660			
GI				



AB Pyrrolothiazoles I [Z = Q1-3; R1-3 = H, halo, lower (halo)alkyl, alkoxy, alkylthio, alkylsulfinyl, or alkylsulfonyl, OH, cyano, NO<sub>2</sub>; A = (substituted) alkylene, alkenylene, or alkynylene; if A = unsubstituted alkylene, then R1 = R2 = R3 ≠ H], their salts, stereoisomers, and solvates are prepared as platelet-activating factor antagonists and thromboxane A<sub>2</sub> inhibitors (no data).  
 2-Cyano-5-(4-methoxyphenyl)-2,4-decadienoic acid (372 mg) was chlorinated with (COCl)<sub>2</sub> in DMF-CH<sub>2</sub>Cl<sub>2</sub> at room temperature for 1 h to give acid chloride. Sep., 400 mg I (Z = OCM<sub>3</sub>, 3-pyridyl) was treated with CF<sub>3</sub>CO<sub>2</sub>H at room temperature for 1 h and treated with the acid chloride and NEt<sub>3</sub> at room temperature for 12 h to give 191 mg I [Z = Q1, R1 = 4-OMe, R2 - R3 = H, A = C(CN):CHCH:C(CH<sub>2</sub>)<sub>4</sub>Me, 3-pyridyl].

IT 153529-75-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);



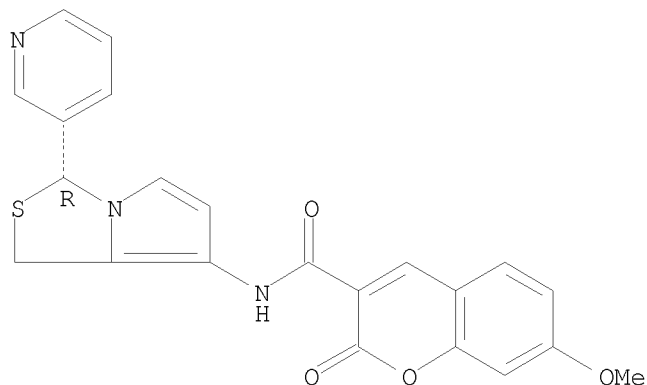
10/513699

BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as pharmaceutical)

RN 153529-75-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-[3-(3-pyridinyl)-1H,3H-pyrrolo[1,2-c]thiazol-7-yl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 151 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:124164 CAPLUS

DOCUMENT NUMBER: 120:124164

ORIGINAL REFERENCE NO.: 120:21661a,21664a

TITLE: Electron topological study of the structure-antiallergic activity relationship in derivatives of chalcone, coumarin, and cinnamic acid

AUTHOR(S): Simonyan, A. V.; Vlasenko, S. P.; Dimoglo, A. S.

CORPORATE SOURCE: Pyatigorsk. Farm. Inst., Russia

SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1993), 27(7), 29-32

CODEN: KHFZAN; ISSN: 0023-1134

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB An interactive search method was employed to find activity fragments and examine structure-activity relationships among 35 derivs. of chalcone, coumarin, and cinnamic acid (passive skin anaphylaxis inhibitors). Conformational anal. and calcn. of electron structures were made and electron topol. matrixes were worked out. The matrixes were used to analyze the structure-activity relations. Characteristics associated with activity are discussed.

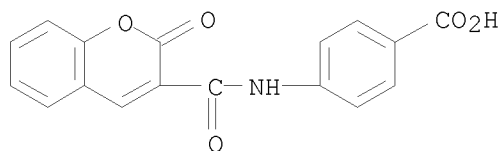
IT 1847-05-8 54396-25-7 57601-45-3  
111947-24-1 139964-77-5 139964-78-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiallergic activity of, structure in relation to)

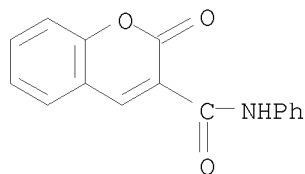
RN 1847-05-8 CAPLUS

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



RN 54396-25-7 CAPLUS

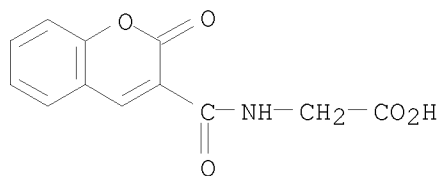
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 57601-45-3 CAPLUS

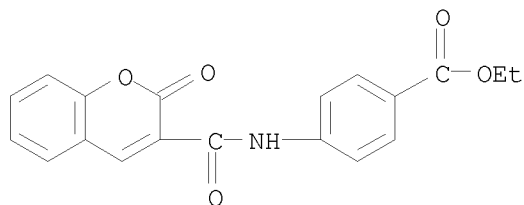
CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

10/513699



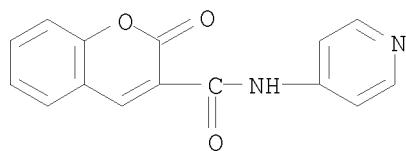
RN 111947-24-1 CAPLUS

CN Benzoic acid, 4-[(2-oxo-2H-1-benzopyran-3-yl)carbonylamino]-, ethyl ester (CA INDEX NAME)



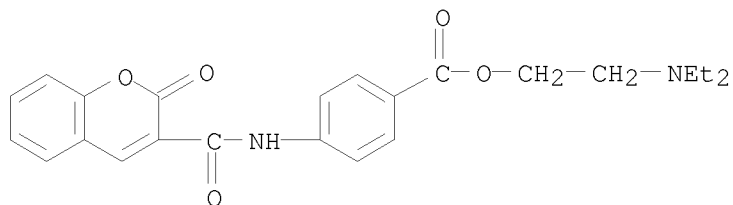
RN 139964-77-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-4-pyridinyl- (CA INDEX NAME)



RN 139964-78-6 CAPLUS

CN Benzoic acid, 4-[(2-oxo-2H-1-benzopyran-3-yl)carbonylamino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)

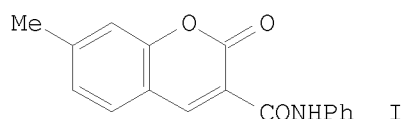


OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 152 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1994:54421 CAPLUS  
DOCUMENT NUMBER: 120:54421  
ORIGINAL REFERENCE NO.: 120:9935a,9938a  
TITLE: Synthesis and pharmacological activity of  
2-oxo-(2H)-1-benzopyran-3-carboxamide derivatives  
AUTHOR(S): Bonsignore, L.; Loy, G.; Secci, D.; Calignano, A.  
CORPORATE SOURCE: Dip. Farm. Chim. Technol., Univ. Cagliari, Cagliari,  
I-09124, Italy  
SOURCE: European Journal of Medicinal Chemistry (1993  
, 28(6), 517-20  
CODEN: EJMCA5; ISSN: 0223-5234  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 120:54421  
GI

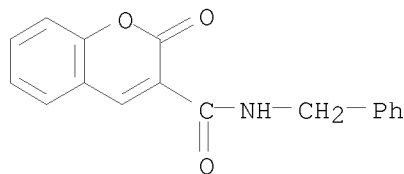


AB Continuing the authors' research on the synthesis and biol. activity of heterocyclic compds. synthesized by carbon suboxide, the authors prepared and screened some 2-oxo-(2H)-1-benzopyran-3-carboxamide derivs., e.g., I. Test data for the diuretic, analgesic and myorelaxant activity are given and discussed.

IT 1846-90-8P 1846-94-2P 1847-00-3P  
38485-81-3P 54396-25-7P 146070-40-8P  
152278-12-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, diuretic, analgesic and myorelaxant activity of)

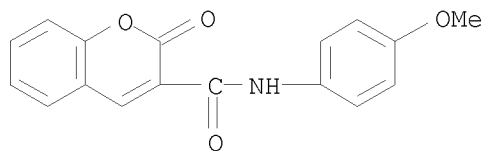
RN 1846-90-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



RN 1846-94-2 CAPLUS

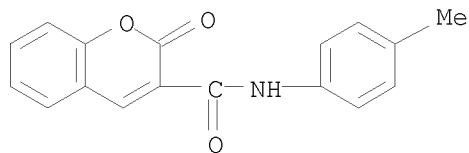
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



10/513699

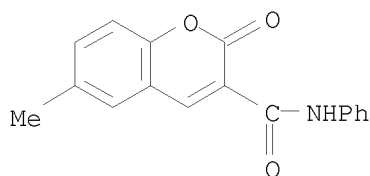
RN 1847-00-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



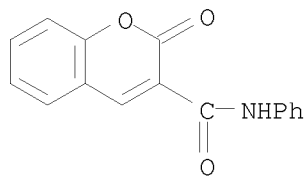
RN 38485-81-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo-N-phenyl- (CA INDEX NAME)



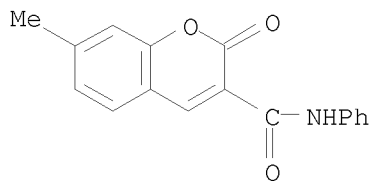
RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 146070-40-8 CAPLUS

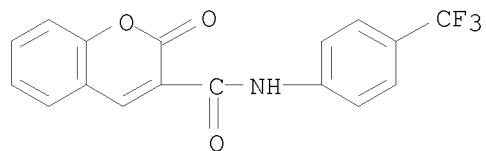
CN 2H-1-Benzopyran-3-carboxamide, 7-methyl-2-oxo-N-phenyl- (CA INDEX NAME)



RN 152278-12-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 69 THERE ARE 69 CAPLUS RECORDS THAT CITE THIS  
RECORD (69 CITINGS)

L9 ANSWER 153 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1994:8614 CAPLUS  
 DOCUMENT NUMBER: 120:8614  
 ORIGINAL REFERENCE NO.: 120:1897a,1900a  
 TITLE: Preparation of piperazine derivatives as wavelength  
 conversion materials for agriculture  
 INVENTOR(S): Takahashi, Hiroshi; Matsui, Nobuo; Yanagisawa,  
 Atsushi; Hamamoto, Isami; Akashi, Yuri; Yagihara,  
 Tomio  
 PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 80 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9309664	A1	19930527	WO 1992-JP1470	19921111 <--
W: KR, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
JP 06040817	A	19940215	JP 1992-315827	19921030 <--
JP 06041524	A	19940215	JP 1992-315828	19921030 <--
EP 579835	A1	19940126	EP 1992-923404	19921111 <--
R: DE, ES, FR, GB, IT, NL				
JP 06038635	A	19940215	JP 1992-350581	19921204 <--
CN 1072945	A	19930609	CN 1992-113523	19921205 <--
JP 06179660	A	19940628	JP 1992-354165	19921215 <--
PRIORITY APPLN. INFO.:			JP 1991-322346	A 19911112
			JP 1991-322347	A 19911112
			JP 1991-348452	A 19911205
			JP 1992-301673	A 19921014
			JP 1992-113204	A1 19920407
			JP 1992-113205	A1 19920407
			JP 1992-113206	A1 19920407
			JP 1992-158970	A1 19920527
			JP 1992-158971	A1 19920527
			JP 1992-158972	A1 19920527
			WO 1992-JP1470	W 19921111

OTHER SOURCE(S): MARPAT 120:8614

AB The materials comprising pyrazine and benzopteridine compds. are prepared that can convert light wavelength suitable for enhancing plant growth. The materials consist of (1)  $\geq 1$  fluorescent pigment (A) having maximum light absorption at 350-450 nm and the maximum light emission at 380-520 nm, and (2)  $\geq 1$  fluorescent pigment (B) having maximum light absorption at 460-580 nm and maximum light emission at 540-800 nm. The ratio of emission intensity of A to the emission intensity of B at the B emission range is kept between 0.2 and 5.0. Polymeric films containing the wavelength converting materials were used in constructing a greenhouse where vegetables were cultured.

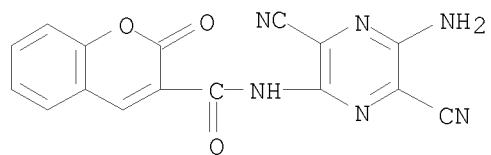
IT 151040-79-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for converting light wavelengths for agriculture)

RN 151040-79-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(5-amino-3,6-dicyano-2-pyrazinyl)-2-oxo-

10/513699

(CA INDEX NAME)



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT:	1	THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L9 ANSWER 154 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1993:665984 CAPLUS  
 DOCUMENT NUMBER: 119:265984  
 ORIGINAL REFERENCE NO.: 119:47477a, 47480a  
 TITLE: Synthesis of fluorescence-labeled nucleic acids  
 INVENTOR(S): Harding, John D.; Gebeyehu, Gulilat; Laskin, Roger;  
 Haces, Alberto  
 PATENT ASSIGNEE(S): Life Technologies, Inc., USA  
 SOURCE: PCT Int. Appl., 42 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9319206	A1	19930930	WO 1993-US2422	19930317 <--

W: CA, JP, US  
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 PRIORITY APPLN. INFO.: US 1992-852705 A2 19920317

AB Fluorescence-labeled nucleic acids of  $\geq 200$ -500 bases, including strands of up to several kilobases in length, are synthesized in an enzyme-catalyzed reaction using deoxyribo- or ribonucleotides covalently linked to a fluorophore via a linkage group having a linear chain of  $>7$  atoms length. A single-stranded binding protein enhances the reaction. The method is useful for providing labeled fluorescent RNA or DNA for sequence anal., for hybridization probes, for histochem. fluorescent labeling, and for microanal. techniques where highly fluorescent RNA or DNA of specified sequence is desired (no data). Fluorescent DNAs of different size ranges were synthesized using various DNA polymerases and reverse transcriptases and different fluorescent dNTPs. The DNA polymerases and reverse transcriptases varied in their abilities to incorporate certain fluorescent dNTPs.

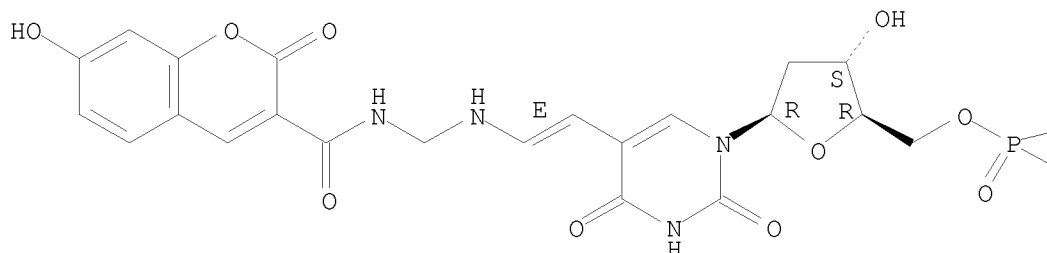
IT 151345-30-1  
 RL: ANST (Analytical study)  
 (in fluorescence-labeled DNA enzymic synthesis)

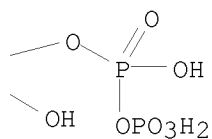
RN 151345-30-1 CAPLUS

CN Uridine 5'-(tetrahydrogen triphosphate),  
 2'-deoxy-5-[2-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]amino]ethenyl]-, (E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

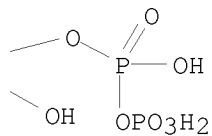
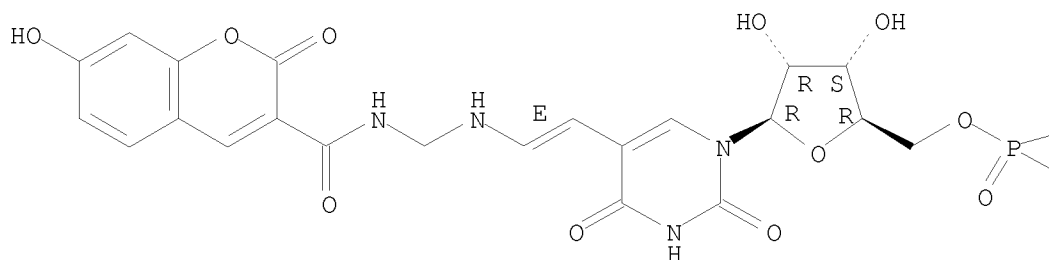
PAGE 1-A





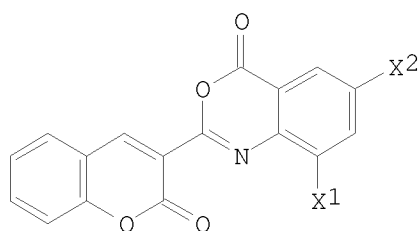
IT 151345-32-3  
 RL: ANST (Analytical study)  
 (in fluorescence-labeled RNA enzymic synthesis)  
 RN 151345-32-3 CAPLUS  
 CN Uridine 5'-(tetrahydrogen triphosphate),  
 5-[2-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]amino]ethenyl]-, (E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

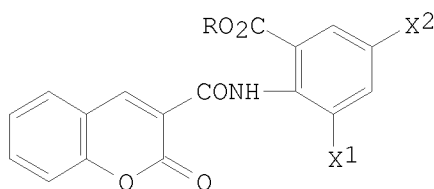


OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
 (4 CITINGS)

L9 ANSWER 155 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1993:625895 CAPLUS  
 DOCUMENT NUMBER: 119:225895  
 ORIGINAL REFERENCE NO.: 119:40323a, 40326a  
 TITLE: Synthesis of some benzoxazin-4-one derivatives and study of their reaction with nucleophilic reagents  
 AUTHOR(S): Selim, M. R.; Aly, F. M.; Bendair, A. H.; Abu-Shanab, F. A.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Nasr, Egypt  
 SOURCE: Journal of the Indian Chemical Society (1992), 69(10), 688-90  
 CODEN: JICSAH; ISSN: 0019-4522  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 119:225895  
 GI

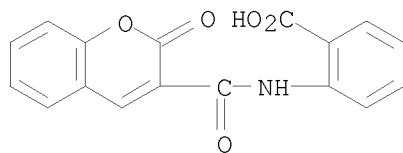


I



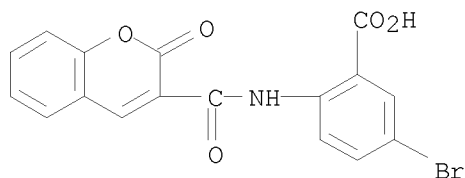
II

AB Treating 3-coumarincarbonyl chloride with anthranilic acids gave the amides, which were cyclized with Ac<sub>2</sub>O to the coumarinylbenzoxazin-4-ones I (X<sub>1</sub>, X<sub>2</sub> = H, Br). Aminolysis and alcoholysis reactions of I were investigated. E.g., alcoholysis of I in boiling alc. gave II (same X<sub>1</sub>, X<sub>2</sub>; R = Me, Et, Bu).  
 IT 73877-78-8P 150711-82-3P 150711-83-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclization of)  
 RN 73877-78-8 CAPLUS  
 CN Benzoic acid, 2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



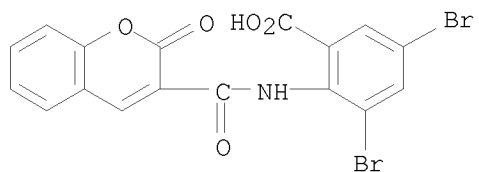
RN 150711-82-3 CAPLUS  
 CN Benzoic acid, 5-bromo-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)

10/513699



RN 150711-83-4 CAPLUS

CN Benzoic acid, 3,5-dibromo-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
(CA INDEX NAME)

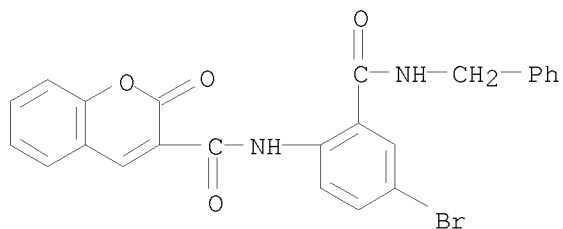


IT 150711-86-7P 150711-87-8P 150711-88-9P  
150711-89-0P 150711-90-3P 150711-91-4P  
150711-92-5P 150711-93-6P 150711-94-7P  
150711-95-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

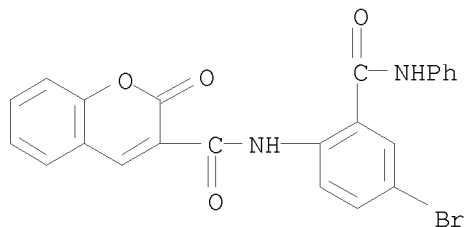
RN 150711-86-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-bromo-2-  
[[ (phenylmethyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 150711-87-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-bromo-2-[(phenylamino)carbonyl]phenyl]-  
2-oxo- (CA INDEX NAME)



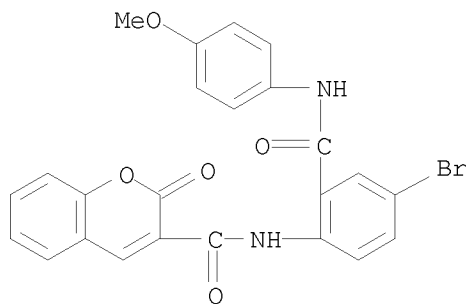
<12/04/2007>

Erich Leese

10/513699

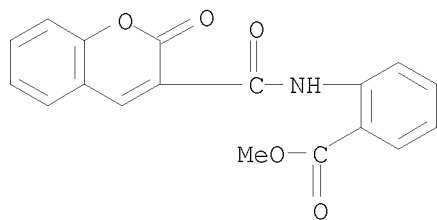
RN 150711-88-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-bromo-2-[[4-methoxyphenyl]amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



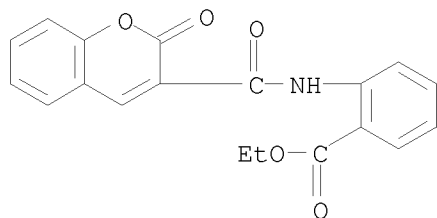
RN 150711-89-0 CAPLUS

CN Benzoic acid, 2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, methyl ester (CA INDEX NAME)



RN 150711-90-3 CAPLUS

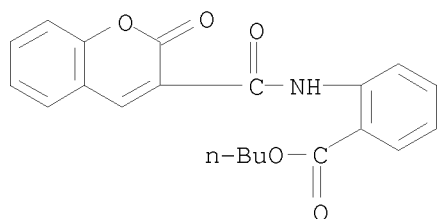
CN Benzoic acid, 2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



RN 150711-91-4 CAPLUS

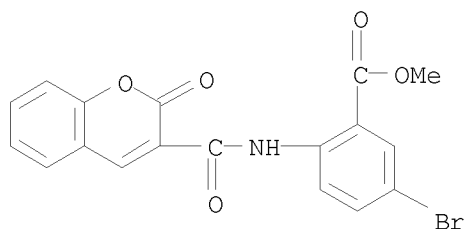
CN Benzoic acid, 2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, butyl ester (CA INDEX NAME)

10/513699



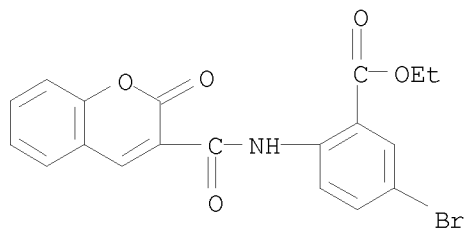
RN 150711-92-5 CAPLUS

CN Benzoic acid, 5-bromo-2-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, methyl ester (CA INDEX NAME)



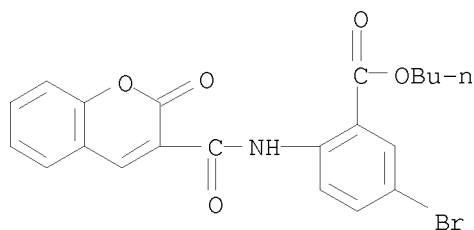
RN 150711-93-6 CAPLUS

CN Benzoic acid, 5-bromo-2-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)



RN 150711-94-7 CAPLUS

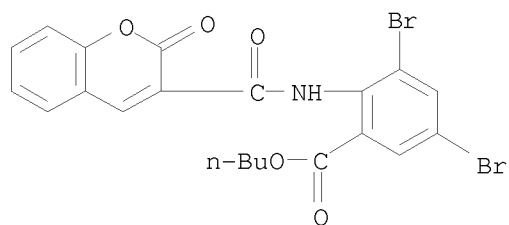
CN Benzoic acid, 5-bromo-2-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, butyl ester (CA INDEX NAME)



RN 150711-95-8 CAPLUS

10/513699

CN Benzoic acid, 3,5-dibromo-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
, butyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (12 CITINGS)

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 156 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:577137 CAPLUS

DOCUMENT NUMBER: 119:177137

ORIGINAL REFERENCE NO.: 119:31571a,31574a

TITLE: Coumarin derivatives for quantitative determination of peroxidation-active substances by chemiluminescence analysis

INVENTOR(S): Aoyama, Norihito; Takenaka, Hideki; Miike, Akira

PATENT ASSIGNEE(S): Kyowa Medex Co., Ltd., Japan

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 9315219	A1	19930805	WO 1993-JP128	19930203 <--
W: JP, US				
JP 2980681	B2	19991122	JP 1993-513100	19930203 <--
US 5851785	A	19981222	US 1994-288738	19940816 <--
PRIORITY APPLN. INFO.:			JP 1992-19043	A 19920204
			WO 1993-JP128	W 19930203
			US 1993-122582	B1 19931001

OTHER SOURCE(S): MARPAT 119:177137

AB Chemiluminescence assays using coumarin derivs. that are operable even in the presence of proteins and an acidic environment are disclosed. The coumarin derivs. react with H2O2 in the presence of peroxidative substances and therefore the method can be used for the determination of the coumarin derivs., H2O2, and the peroxidative substances. The derivs. are especially useful for detecting peroxidase, e.g. peroxidase-labeled antigen or antibody, for immunoassay. Thus, several coumarin derivs. were used for quant. determination of carcinoembryonic antigen (CEA) using the glucose oxidase-labeled anti-CEA antibody. Anti- $\alpha$ -fetoprotein antibody labeled with a coumarin derivative was determined in the presence of H2O2. The lack of protein interference by this method was also demonstrated.

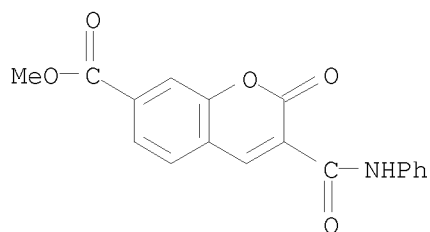
IT 150460-82-5

RL: ANST (Analytical study)

(coumarin derivative, for determining peroxidn. active substance or hydrogen peroxide)

RN 150460-82-5 CAPLUS

CN 2H-1-Benzopyran-7-carboxylic acid, 2-oxo-3-[(phenylamino)carbonyl]-, methyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

<12/04/2007>

Erich Leese



10/513699

(4 CITINGS)

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 157 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:559802 CAPLUS

DOCUMENT NUMBER: 119:159802

ORIGINAL REFERENCE NO.: 119:28617a,28620a

TITLE: Synthesis and antiallergic activity in the series of cinnamic acid derivatives

AUTHOR(S): Saraf, A. S.; Simonyan, A. V.

CORPORATE SOURCE: Pyatigorsk. Farm. Inst., Russia

SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1992), 26(7-8), 45-8

CODEN: KHFZAN; ISSN: 0023-1134

DOCUMENT TYPE: Journal

LANGUAGE: Russian

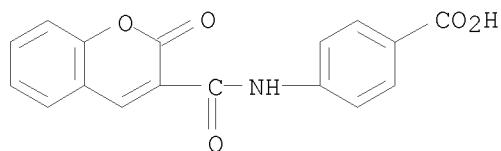
AB The paper provides the rationale for the antiallergic activity of cinnamic acid derivs. and coumarin. There has been prediction and subsequent goal-oriented synthesis of new series of cinnamic acid derivs. The mechanisms of their structure-antiallergic activity relationships have been found. It is suggested that this type of the activity shown by coumarins is due to their potential conversion to cinnamic acids in the body as a result of decyclization.

IT 1847-05-8P 54396-25-7P 111947-24-1P  
139964-78-6P 139964-79-7P 150231-88-2P  
150231-89-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as allergy inhibitor)

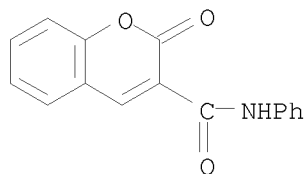
RN 1847-05-8 CAPLUS

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



RN 54396-25-7 CAPLUS

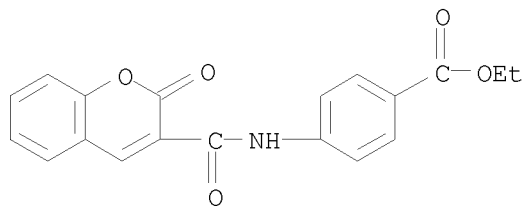
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



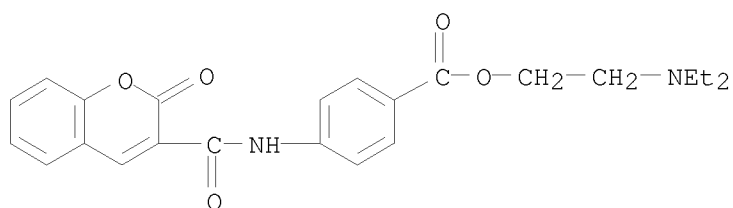
RN 111947-24-1 CAPLUS

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)

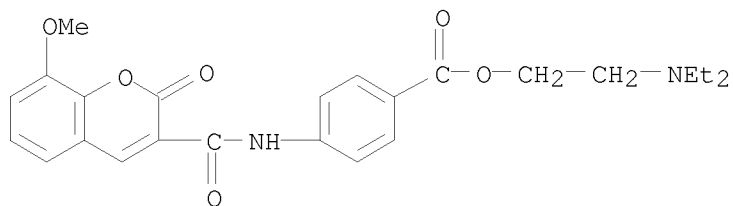
10/513699



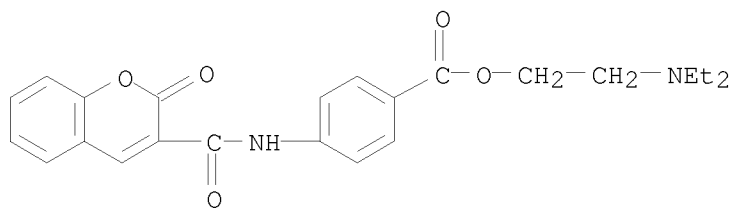
RN 139964-78-6 CAPLUS  
CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)



RN 139964-79-7 CAPLUS  
CN Benzoic acid, 4-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)



RN 150231-88-2 CAPLUS  
CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester, hydrochloride (1:1) (CA INDEX NAME)



● HCl

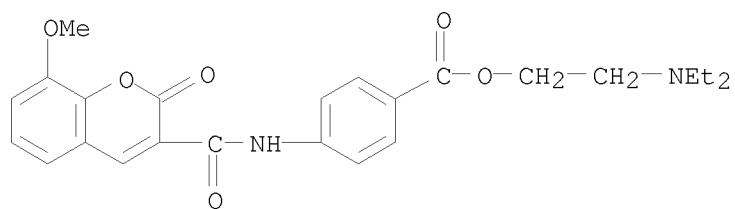
RN 150231-89-3 CAPLUS

<12/04/2007>

Erich Leese

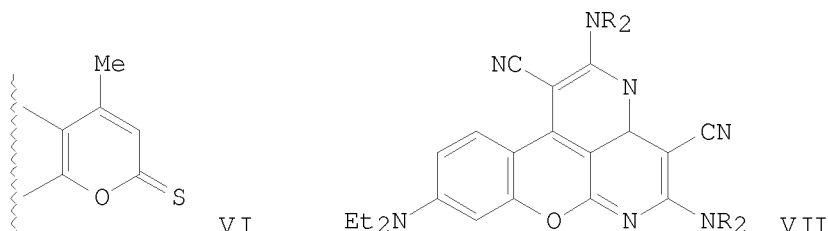
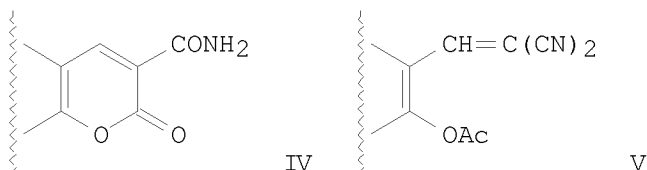
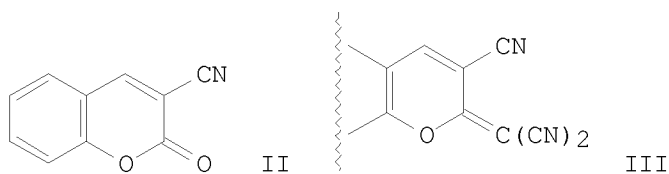
10/513699

CN Benzoic acid, 4-[[ (8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L9 ANSWER 158 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1993:449262 CAPLUS  
 DOCUMENT NUMBER: 119:49262  
 ORIGINAL REFERENCE NO.: 119:8937a,8940a  
 TITLE: Reaction of 4-(diethylamino)salicylaldehyde with malononitrile  
 AUTHOR(S): Tkach, I. I.; Reznichenko, A. V.; Luk'yanets, E. A.  
 CORPORATE SOURCE: Nauchno-Issled. Inst. Org. Poluprod. Krasitel., Moscow, 103787, Russia  
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1992), (8), 1043-52  
 CODEN: KGSSAQ; ISSN: 0132-6244  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 119:49262  
 GI

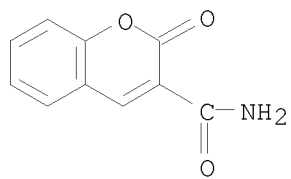


AB Treating 4-(diethylamino)salicylaldehyde (I) with  $\text{CH}_2(\text{CN})_2$  in AcOH gave 27% coumarin derivative II and 6.2% coumarin III; in polyphosphoric acid 53% amide IV was obtained; and in Ac<sub>2</sub>O 49% dicyanovinyl derivative V was obtained. Addnl. obtained were thione VI and benzopyranonaphthyridines VII (R = H, Et).

IT 1846-78-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 1846-78-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:

2

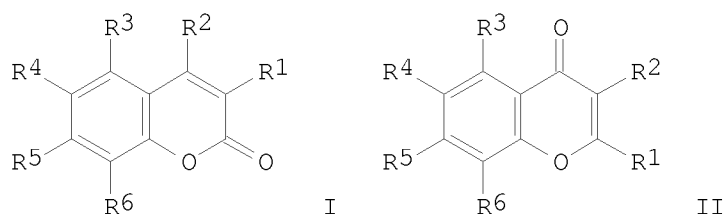
THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

<12/04/2007>

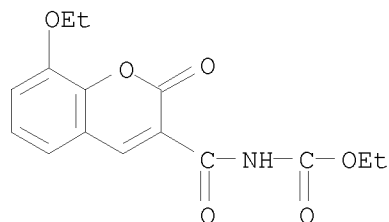
Erich Leese

10/513699

L9 ANSWER 159 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1993:427967 CAPLUS  
DOCUMENT NUMBER: 119:27967  
ORIGINAL REFERENCE NO.: 119:5177a,5180a  
TITLE: An easy and absolute diagnosis for the  
coumarin/chromone discrimination by using oxygen-17  
NMR  
AUTHOR(S): Nagasawa, Kazuo; Higuchi, Yukako; Ito, Keiichi;  
Imanari, Mamoru; Fujii, Naoyuki  
CORPORATE SOURCE: Hokkaido Coll. Pharm., Otaru, 047-02, Japan  
SOURCE: Chemical & Pharmaceutical Bulletin (1993),  
41(1), 211-13  
CODEN: CPBTAL; ISSN: 0009-2363  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



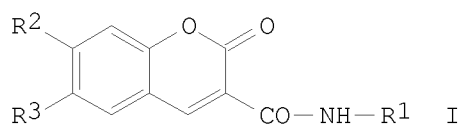
AB 17O-NMR at natural abundance was, for the first time, employed effectively  
for the characterization between coumarins I (R1 = H, CO2H, NO2,  
CONHCO2Et; R2 = H, Me, Cl; R3 = H, Me; R4 = H, Br; R3R4 = CH:CHCH:CH; R5 =  
H, Me; R6 = H, OMe) and chromones II (R1 = H, Me, CO2H; R2 = H, CN, CHO;  
R3 = H, Me; R4 = H, Br; R3R4 = CH:CHCH:CH; R5 = H, Me, R6 = H).  
IT 147753-59-1  
RL: PROC (Process)  
(oxygen-17 NMR of)  
RN 147753-59-1 CAPLUS  
CN Carbamic acid, [(8-ethoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, ethyl  
ester (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 160 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1993:417367 CAPLUS  
DOCUMENT NUMBER: 119:17367  
ORIGINAL REFERENCE NO.: 119:3117a,3120a  
TITLE: Influence of some instrumental parameters on ionizing  
conditions in an ion trap  
AUTHOR(S): Catinella, S.; Traldi, P.; Celon, E.  
CORPORATE SOURCE: CNR, Padova, I-35020, Italy  
SOURCE: Rapid Communications in Mass Spectrometry (  
1993), 7(4), 315-17  
CODEN: RCMSEF; ISSN: 0951-4198  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

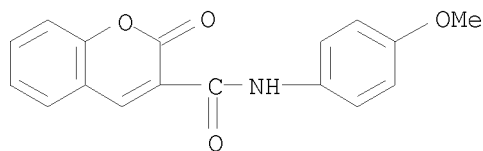


AB A study on the influence of different instrumental parameters in the production of M<sup>+</sup>. ions was undertaken. The authors studied the variation of the abundance of M<sup>+</sup>. ions of R<sup>1</sup> = C<sub>6</sub>H<sub>5</sub>, R<sup>2</sup> = H; R<sup>1</sup> = C<sub>6</sub>H<sub>5</sub>, R<sup>2</sup> = CH<sub>3</sub>, R<sup>3</sup> = H; R<sup>1</sup> = C<sub>7</sub>H<sub>7</sub>O, R<sup>2</sup> = R<sup>3</sup> = H; by varying I the ionizing time, in the presence of He buffer gas (at a typical pressure of 1 + 10<sup>-4</sup> Torr), introducing samples of comparable size. When He is present, the ionizing time has practically no influence on the mol. ion abundance of the 3 compds. under study.

IT 1846-94-2P 54396-25-7P 146070-40-8P  
RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, instrumental parameter influence on, in ion trap of mass spectrometer)

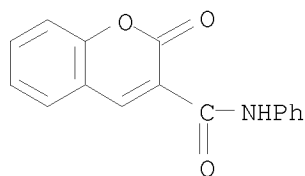
RN 1846-94-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

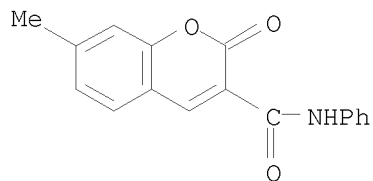




10/513699

RN 146070-40-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-methyl-2-oxo-N-phenyl- (CA INDEX NAME)



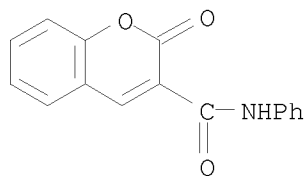
IT 148088-04-4 148088-05-5 148088-06-6

RL: PRP (Properties)

(radical cation formation from, instrumental parameter influence on, in ion trap of mass spectrometer)

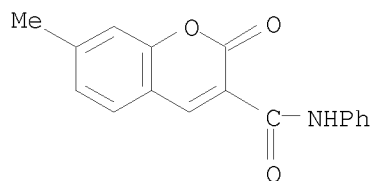
RN 148088-04-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl-, radical ion(1+) (9CI) (CA INDEX NAME)



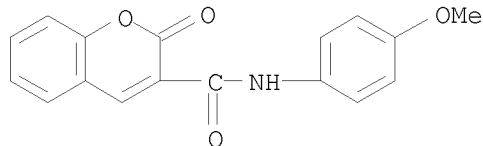
RN 148088-05-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-methyl-2-oxo-N-phenyl-, radical ion(1+) (9CI) (CA INDEX NAME)

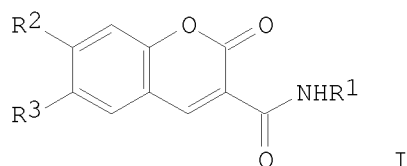


RN 148088-06-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo-, radical ion(1+) (9CI) (CA INDEX NAME)

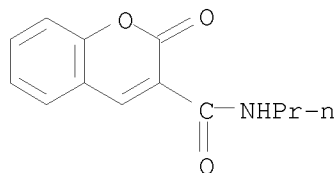


L9 ANSWER 161 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1993:147351 CAPLUS  
 DOCUMENT NUMBER: 118:147351  
 ORIGINAL REFERENCE NO.: 118:25331a,25334a  
 TITLE: Comparison of ion trap and sector instruments in the study of fragmentation patterns of coumarins  
 AUTHOR(S): Podda, G.; Bonsignore, L.; Loy, G.; Catinella, S.; Traldi, P.  
 CORPORATE SOURCE: Dip. Farm. Chim. Tecnol., Univ. Cagliari, Cagliari, 09100, Italy  
 SOURCE: Organic Mass Spectrometry (1992), 27(11), 1220-4  
 CODEN: ORMSBG; ISSN: 0030-493X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 118:147351  
 GI



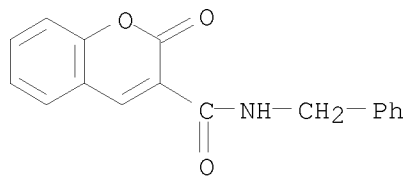
AB The mass spectra of a series of differently substituted coumarins I (R1 = Ph, R2 = H, Me, Cl, R3 = H; R1 = Ph, R2 = H, R3 = Me; R1 = PhCH2, 4-MeC6H4, 4-MeOC6H4, 4-CF3C6H4, Me2CH, R2 = R3 = H) were obtained by high- and low-energy collision expts. The results obtained by the two techniques show peculiar differences, mainly in the presence, under ion trap conditions, of a high relative abundance of M+•. The results support the validity of the ion trap technique basic studies of mass spectrometry.

IT 1846-81-7P 1846-90-8P 1846-94-2P  
 38485-81-3P 54396-25-7P 146070-40-8P  
 146472-61-9P 146472-62-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and mass spectral fragmentation patterns of)  
 RN 1846-81-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-propyl- (CA INDEX NAME)

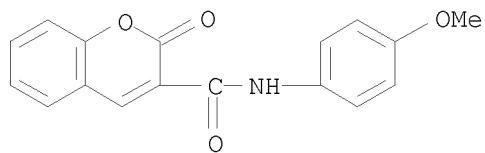


RN 1846-90-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)

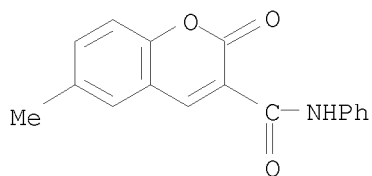
10/513699



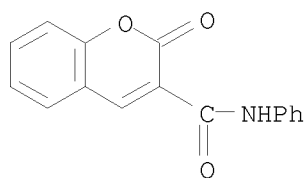
RN 1846-94-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



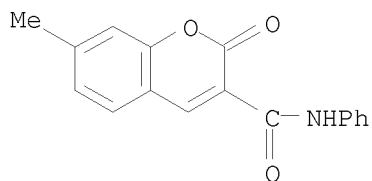
RN 38485-81-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo-N-phenyl- (CA INDEX NAME)



RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 146070-40-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-methyl-2-oxo-N-phenyl- (CA INDEX NAME)

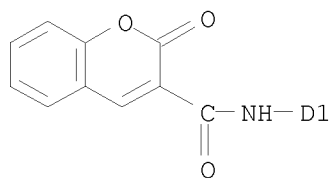


10/513699

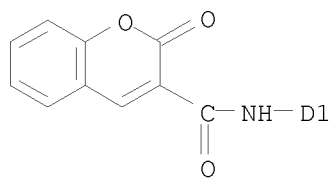
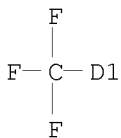
RN 146472-61-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(methylphenyl)-2-oxo- (9CI) (CA INDEX NAME)



D1-Me



RN 146472-62-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

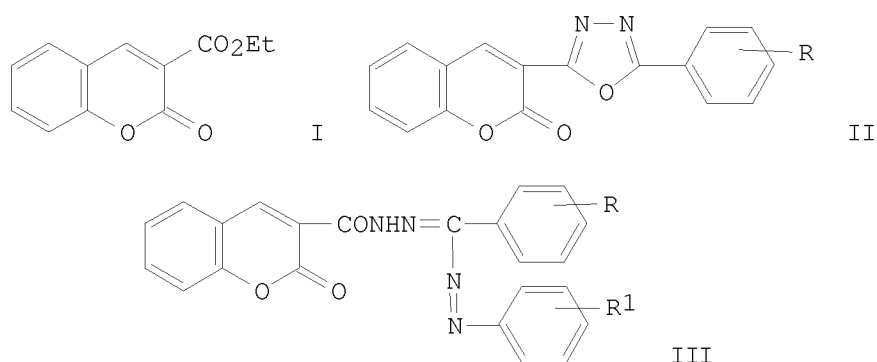


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 162 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1992:651198 CAPLUS  
 DOCUMENT NUMBER: 117:251198  
 ORIGINAL REFERENCE NO.: 117:43487a, 43490a  
 TITLE: Coumarin congeners as antidepressants  
 AUTHOR(S): Singh, V.; Srivastava, V. K.; Palit, G.; Shanker, K.  
 CORPORATE SOURCE: Dep. Pharmacol. Ther., King George's Med. Coll.,  
 Lucknow, India  
 SOURCE: Arzneimittel-Forschung (1992), 42(8), 993-6  
 CODEN: ARZNAD; ISSN: 0004-4172  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB 3-(Ethoxycarbonyl)coumarin (I) was treated with  $N_2H_4 \cdot H_2O$  to give the corresponding hydrazide which was condensed with  $RC_6H_4CHO$  [R = H; 4-OH, 3-OMe; 3,4-(MeO) $_2$ ] to give their hydrazones. The latter underwent cyclization with  $FeCl_3$  to give oxadiazoles II (R as above) and coupling with aryldiazonium chlorides to give coumarin derivs. III (R as above, R $_1$  = 3-, 4-Cl, 3-, 4-Me). Addnl. obtained were anilides IV (R as above). II-IV were tested for their antidepressant activity and III [R = 4-OH, 3-OMe, R $_1$  = 3-, 4-Cl; R = 3,4-(MeO) $_2$ , R $_1$  = 4-Cl] had greater activity than imipramine with less toxicity.

IT 1847-00-3P 1847-01-4P 54396-25-7P  
 143814-50-0P 143814-51-1P 143814-52-2P  
 143814-53-3P 143814-54-4P 143814-55-5P  
 143814-56-6P 143814-57-7P 143814-58-8P  
 143814-59-9P

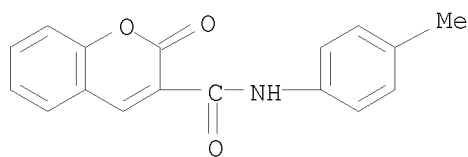
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antidepressant activity of)

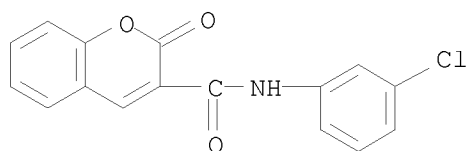
RN 1847-00-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)

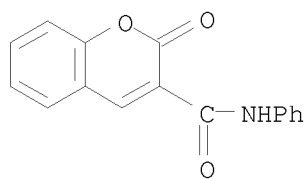
10/513699



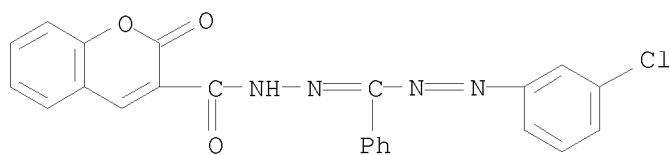
RN 1847-01-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-chlorophenyl)-2-oxo- (CA INDEX NAME)



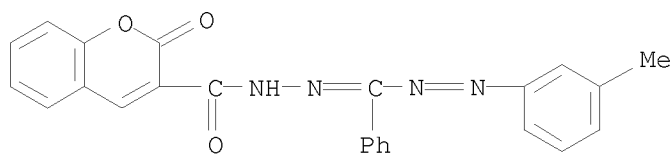
RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 143814-50-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(3-chlorophenyl)diazenyl]phenylmethylene]hydrazide (CA INDEX NAME)



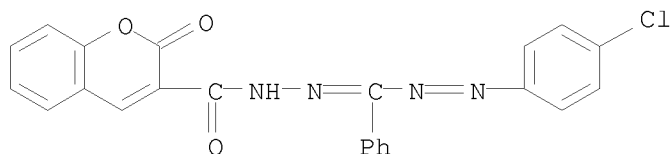
RN 143814-51-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(3-methylphenyl)diazenyl]phenylmethylene]hydrazide (CA INDEX NAME)



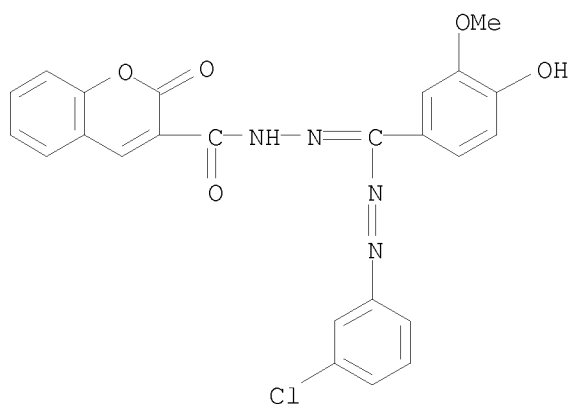
RN 143814-52-2 CAPLUS

10/513699

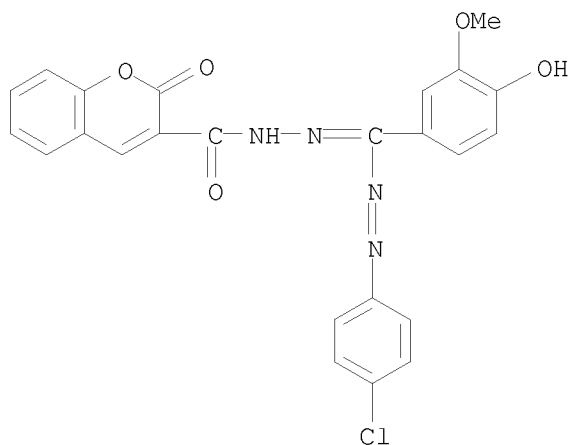
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(4-chlorophenyl)diazenyl]phenylmethylene]hydrazide (CA INDEX NAME)



RN 143814-53-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(3-chlorophenyl)diazenyl](4-hydroxy-3-methoxyphenyl)methylene]hydrazide (CA INDEX NAME)

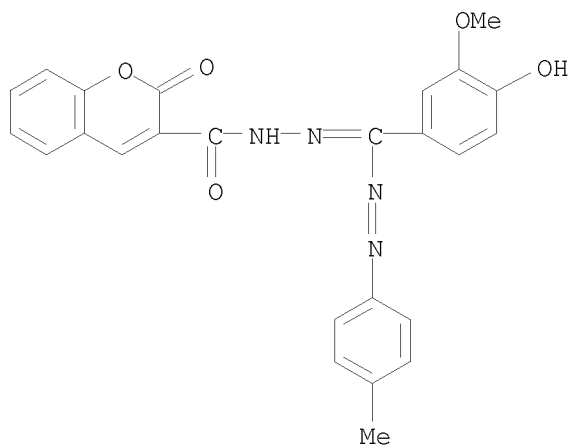


RN 143814-54-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(4-chlorophenyl)diazenyl](4-hydroxy-3-methoxyphenyl)methylene]hydrazide (CA INDEX NAME)

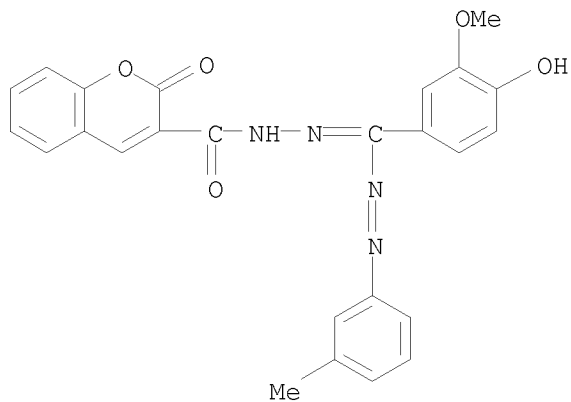


10/513699

RN 143814-55-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(4-hydroxy-3-methoxyphenyl)[2-(4-  
methylphenyl)diazenyl]methylene]hydrazide (CA INDEX NAME)



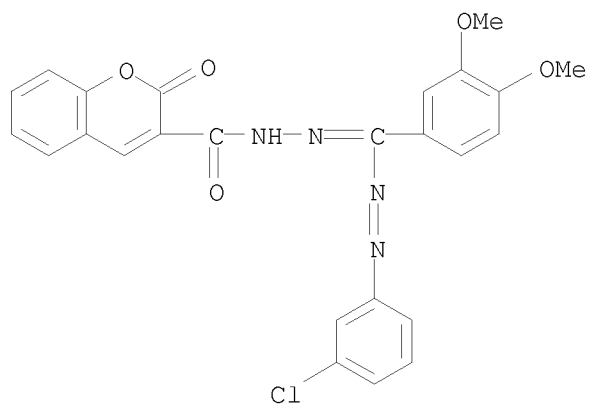
RN 143814-56-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(4-hydroxy-3-methoxyphenyl)[2-(3-  
methylphenyl)diazenyl]methylene]hydrazide (CA INDEX NAME)



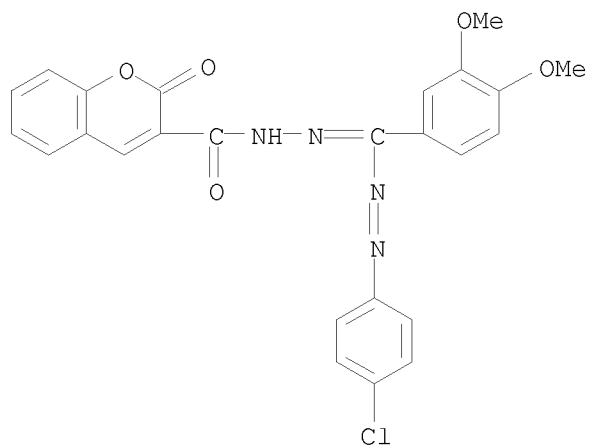
RN 143814-57-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(3-chlorophenyl)diazenyl](3,4-dimethoxyphenyl)methylene]hydrazide  
(CA INDEX NAME)



10/513699

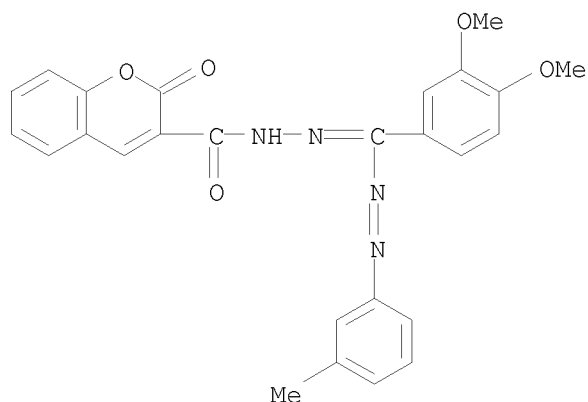


RN 143814-58-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[2-(4-chlorophenyl)diazenyl](3,4-dimethoxyphenyl)methylene]hydrazide  
(CA INDEX NAME)

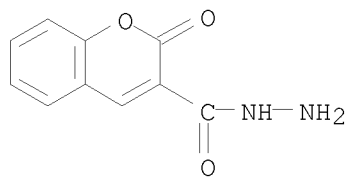


RN 143814-59-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(3,4-dimethoxyphenyl)[2-(3-methylphenyl)diazenyl]methylene]hydrazide  
(CA INDEX NAME)

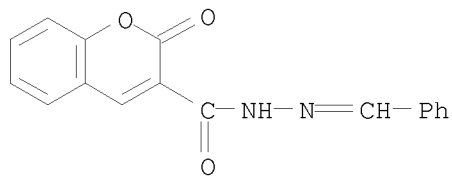
10/513699



IT 1846-91-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and condensation with arylaldehydes)  
RN 1846-91-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazone (CA INDEX NAME)

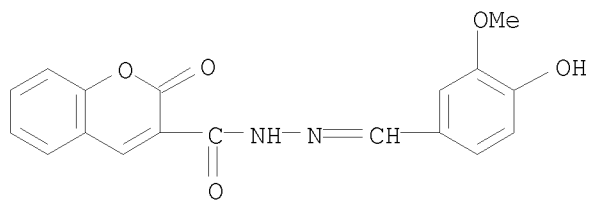


IT 107552-15-8P 143814-48-6P 143814-49-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and coupling reaction of, with aryldiazonium chlorides)  
RN 107552-15-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(phenylmethylene)hydrazide  
(CA INDEX NAME)

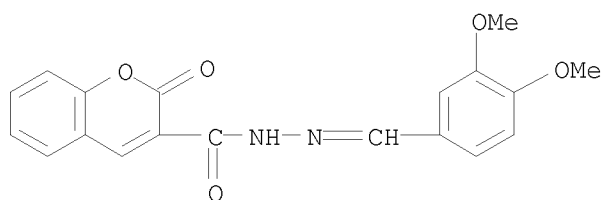


RN 143814-48-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(4-hydroxy-3-methoxyphenyl)methylene]hydrazide (CA INDEX NAME)

10/513699



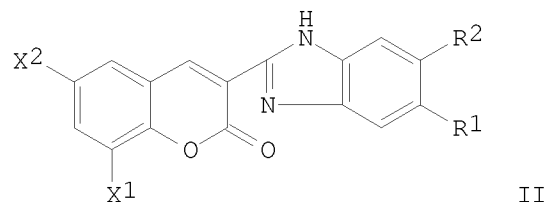
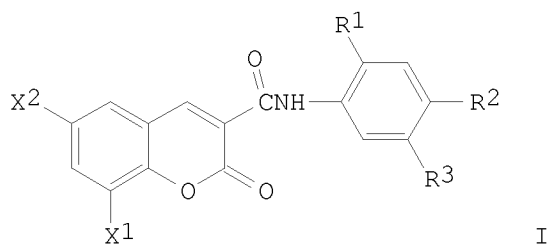
RN 143814-49-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(3,4-dimethoxyphenyl)methylene]hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS  
RECORD (13 CITINGS)

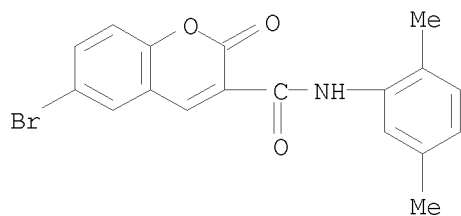
10/513699

L9 ANSWER 163 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1992:550840 CAPLUS  
DOCUMENT NUMBER: 117:150840  
ORIGINAL REFERENCE NO.: 117:26125a,26128a  
TITLE: Reactions of 3-carboethoxy-6-bromo and -6,8-dibromo  
coumarins with highly biologically active amino  
compounds  
AUTHOR(S): Selim, M. R.  
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Nasr, Egypt  
SOURCE: Scientist of Physical Sciences (1992), 4(1),  
34-8  
CODEN: SPSCEV; ISSN: 0970-9150  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

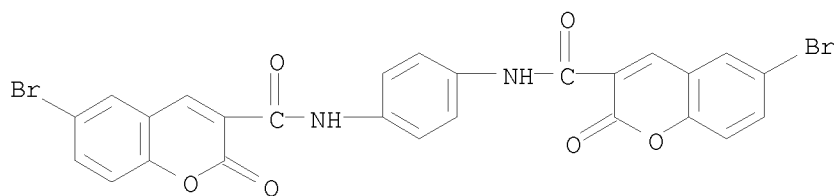


AB Condensation of 3-carboethoxy-6-bromo- and -6,8-dibromocoumarins with  
aniline derivs. is reported. Condensation products, e.g., I (X1 = X2 =  
Br, R1 = R2 = Cl, R3 = H) and cyclocondensation products, e.g., II (X1 =  
H, X2 = Br, R1 = R2 = H) are formed in 65-80% yield.  
IT 5188-55-6P 143376-78-7P 143376-80-1P  
143376-82-3P 143376-84-5P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 5188-55-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2,5-dimethylphenyl)-2-oxo- (CA  
INDEX NAME)

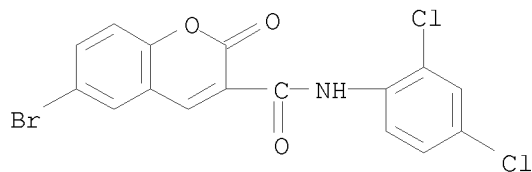
10/513699



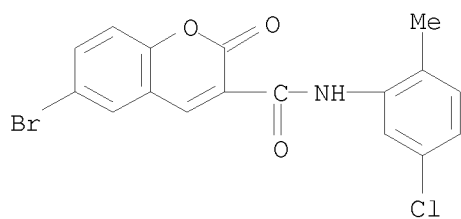
RN 143376-78-7 CAPLUS  
CN 2H-1-Benzopyran-2-one, 3,3'-[1,4-phenylenebis(iminocarbonyl)]bis[6-bromo- (9CI) (CA INDEX NAME)



RN 143376-80-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2,4-dichlorophenyl)-2-oxo- (CA INDEX NAME)

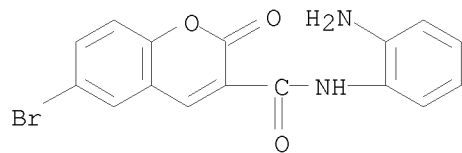


RN 143376-82-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(5-chloro-2-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 143376-84-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminophenyl)-6-bromo-2-oxo- (CA INDEX NAME)

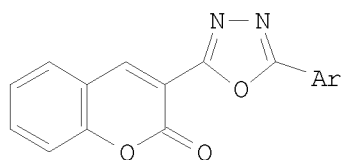
10/513699



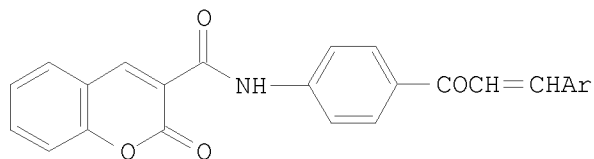
OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 164 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1992:511529 CAPLUS  
 DOCUMENT NUMBER: 117:111529  
 ORIGINAL REFERENCE NO.: 117:19463a,19466a  
 TITLE: Synthesis of certain novel 3-substituted coumarins  
 AUTHOR(S): Badran, M. M.; El-Gendy, A. A.; Soliman, L. N.;  
 El-Assi, H. R.  
 CORPORATE SOURCE: Fac. Pharm., Cairo Univ., Cairo, Egypt  
 SOURCE: Bulletin of the Faculty of Pharmacy (Cairo University)  
 (1990), 28(2), 39-42  
 CODEN: BFPHA8; ISSN: 0575-1373  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 117:111529  
 GI



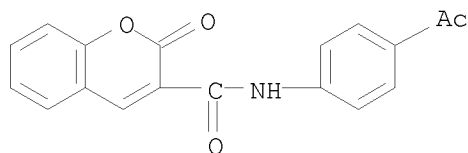
I



III

AB The synthesis of a series of 3-(1,3,4-oxadiazolyl)coumarins I [Ar = Ph, 2-ClC<sub>6</sub>H<sub>4</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>, 3-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 3,5-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 4-AcNHC<sub>6</sub>H<sub>4</sub>, 3-pyridyl, 4-pyridyl, 2-HOC<sub>6</sub>H<sub>4</sub>, 3-AcOC<sub>6</sub>H<sub>4</sub>] is described. Treatment of 3-carbethoxycoumarin (II) with several acid hydrazides afforded the corresponding acyl coumarin carboxhydrazides which undergo cyclization in presence of POCl<sub>3</sub> or Ac<sub>2</sub>O to give I. Addnl., condensation of II with p-aminoacetophenone gave the corresponding intermediate which reacted with a number of aromatic aldehydes to yield the chalcone analogs III [Ar = Ph, 4-ClC<sub>6</sub>H<sub>4</sub>, 3-O<sub>2</sub>NH<sub>6</sub>H<sub>4</sub>, 2-MeOC<sub>6</sub>H<sub>4</sub>, 2,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>].  
 IT 142818-76-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and condensation reaction of, with aromatic aldehydes)  
 RN 142818-76-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(4-acetylphenyl)-2-oxo- (CA INDEX NAME)

10/513699

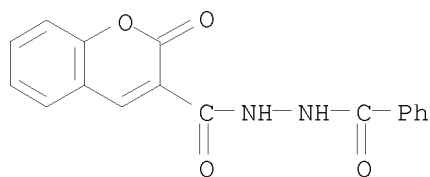


IT 142818-66-4P 142818-67-5P 142818-68-6P  
142818-69-7P 142818-70-0P 142818-71-1P  
142818-72-2P 142818-73-3P 142818-74-4P  
142818-75-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and cyclization of)

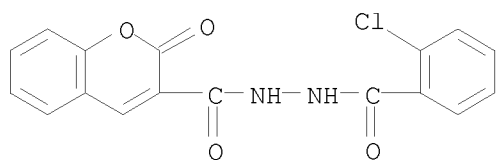
RN 142818-66-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-benzoylhydrazide (CA INDEX  
NAME)



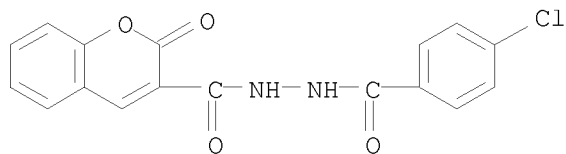
RN 142818-67-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(2-chlorobenzoyl)hydrazide  
(CA INDEX NAME)



RN 142818-68-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(4-chlorobenzoyl)hydrazide  
(CA INDEX NAME)



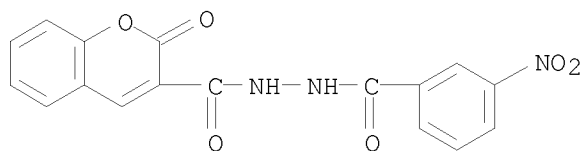
RN 142818-69-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(3-nitrobenzoyl)hydrazide



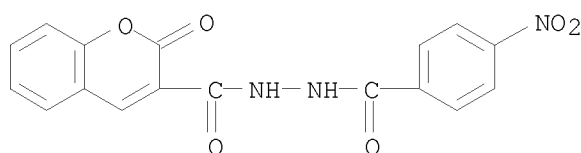
10/513699

(CA INDEX NAME)



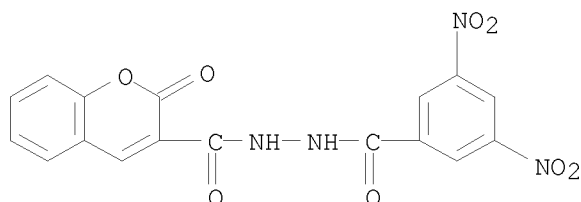
RN 142818-70-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(4-nitrobenzoyl)hydrazide  
(CA INDEX NAME)



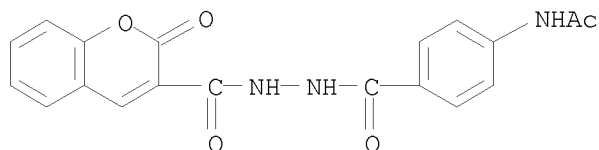
RN 142818-71-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(3,5-dinitrobenzoyl)hydrazide  
(CA INDEX NAME)



RN 142818-72-2 CAPLUS

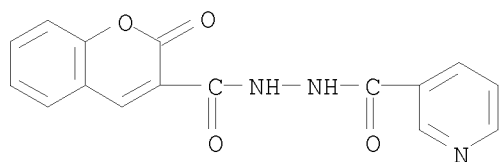
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[4-(acetylamino)benzoyl]hydrazide (CA INDEX NAME)



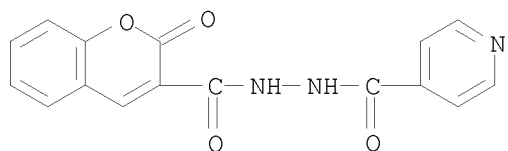
RN 142818-73-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide  
(CA INDEX NAME)

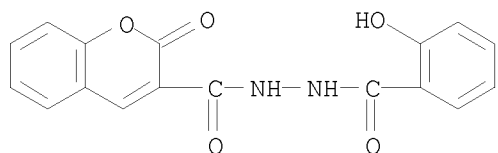
10/513699



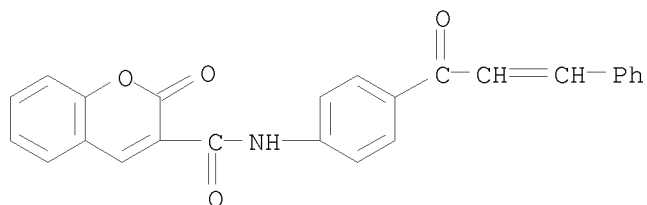
RN 142818-74-4 CAPLUS  
CN 4-Pyridinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



RN 142818-75-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(2-hydroxybenzoyl)hydrazide (CA INDEX NAME)

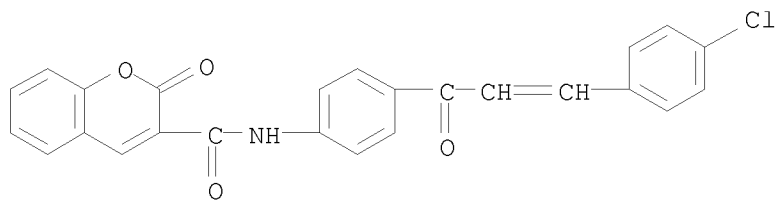


IT 142818-84-6P 142818-85-7P 142818-86-8P  
142818-87-9P 142818-88-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 142818-84-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-(1-oxo-3-phenyl-2-propen-1-yl)phenyl]- (CA INDEX NAME)



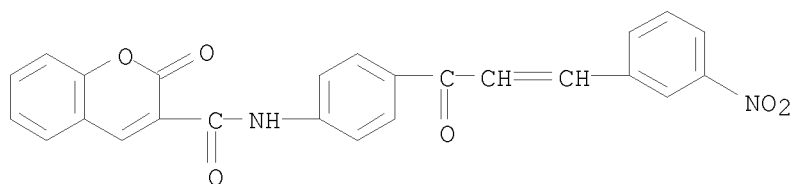
RN 142818-85-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[3-(4-chlorophenyl)-1-oxo-2-propen-1-yl]phenyl]-2-oxo- (CA INDEX NAME)

10/513699



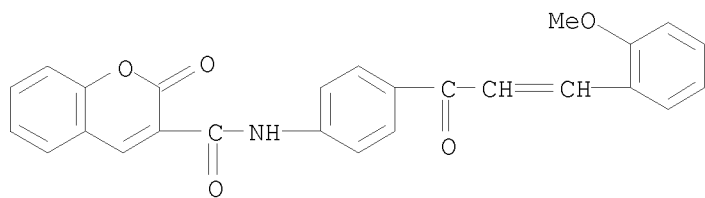
RN 142818-86-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[3-(3-nitrophenyl)-1-oxo-2-propen-1-yl]phenyl]-2-oxo- (CA INDEX NAME)



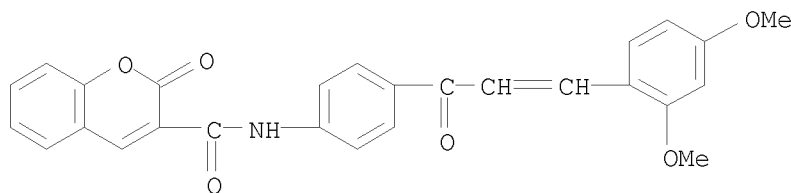
RN 142818-87-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[3-(2-methoxyphenyl)-1-oxo-2-propen-1-yl]phenyl]-2-oxo- (CA INDEX NAME)



RN 142818-88-0 CAPLUS

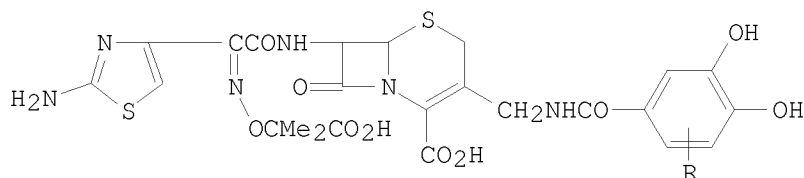
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[3-(2,4-dimethoxyphenyl)-1-oxo-2-propen-1-yl]phenyl]-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 165 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1992:448155 CAPLUS  
 DOCUMENT NUMBER: 117:48155  
 ORIGINAL REFERENCE NO.: 117:8575a,8578a  
 TITLE: Pharmacokinetics of catechol cephalosporins. The effect of incorporating substituents into the catechol moiety on pharmacokinetics in a marmoset model  
 AUTHOR(S): Bird, T. G. C.; Arnould, J. C.; Bertrandie, A.; Jung, F. H.  
 CORPORATE SOURCE: Cent. Rech., ICI PHARMA, Reims, 51064, Fr.  
 SOURCE: Journal of Medicinal Chemistry (1992), 35(14), 2643-51  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



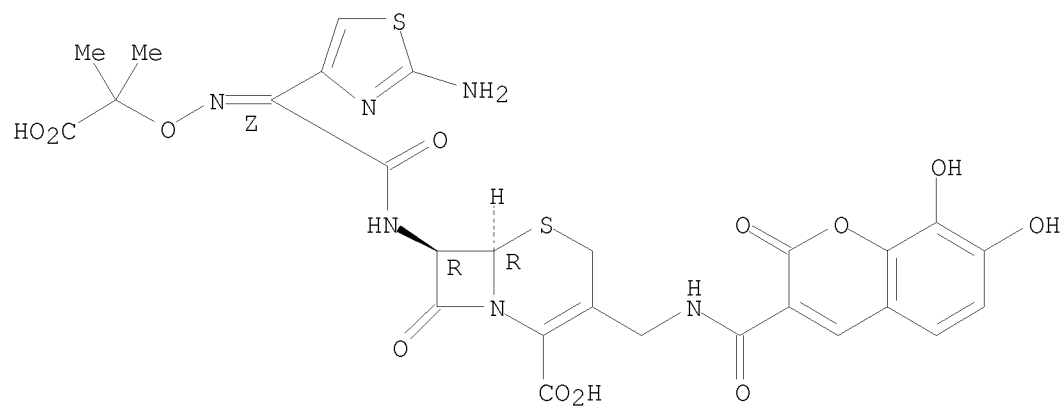
I

AB Two series of cephalosporins (38 compds.) have been synthesized, bearing at C-3' catechols substituted with various electron-withdrawing groups and differing links, and were evaluated for their in vitro antibacterial activity and their pharmacokinetics in marmosets. Compds. bearing an isobutyric oxime substituent, proved to be highly active against Gram-neg. organisms and were especially noteworthy for showing long elimination phase ( $\beta$ ) half-lives in marmosets. It was established that introduction of electron-withdrawing substituents greatly increased the  $\beta$  half-lives of compds. (I, R = H,  $t_{1/2}$  = 1.25 h, serum concentration = 27 mg/h per L; I, R = 5-Cl,  $t_{1/2}$  = 4.5 h, serum concentration = 638 mg/h per L) and that the nature of the link also influenced  $t_{1/2}$ . Acidities (pKa values) of the substituted catechols were measured, and relationships between the acidities and half-lives were evaluated. Thus it was established that the more acidic catechols gave the longest half-lives (I, R = 2,5-Cl<sub>2</sub>,  $t_{1/2}$  = 8.2 h, serum concentration = 461 mg/h per L). Further elaboration of the catechol to bicyclic systems maintained good pharmacokinetics when the pKa was sufficiently acidic.  
 IT 122234-33-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and pharmacokinetics of)  
 RN 122234-33-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[(2-amino-4-thiazolyl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-[[[(7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-8-oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699

Double bond geometry as shown.

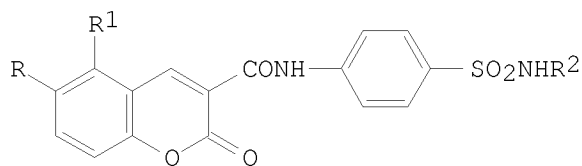


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 166 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1992:255441 CAPLUS  
 DOCUMENT NUMBER: 116:255441  
 ORIGINAL REFERENCE NO.: 116:43307a, 43310a  
 TITLE: Synthesis of some  
 coumarin-3-(4-aminosulfonyl)carbanilide derivatives.  
 Metabolic behavior and antimicrobial activity  
 AUTHOR(S): Moustafa, M. A. A.  
 CORPORATE SOURCE: Fac. Pharm., Univ. Mansoura, Mansoura, 35516, Egypt  
 SOURCE: Scientia Pharmaceutica (1991), 59(3), 213-20  
 CODEN: SCPHA4; ISSN: 0036-8709  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 116:255441  
 GI

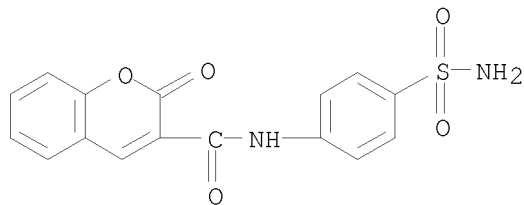


I

AB Title compds. I (R = H, Br, NO<sub>2</sub>, R<sub>1</sub> = H; RR<sub>1</sub> = CH:CHCH:CH; R<sub>2</sub> = H, Ac, 2-pyrimidyl, 2-thiazolyl, 5-methyl-3-isoxazolyl) were prepared in 55-95% yields from EtO<sub>2</sub>CCH<sub>2</sub>CONHC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NHR<sub>2</sub>-4 (II) by cyclocondensation with 5,6-RR<sub>1</sub>C<sub>6</sub>H<sub>3</sub>CHO. II were prepared by treating CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> with H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NHR<sub>2</sub>-4. IR and NMR spectroscopic data for all 25 compds. are given. A study of the metabolism of I (R = R<sub>1</sub> = H, R<sub>2</sub> = 2-pyrimidyl; RR<sub>1</sub> = CH:CHCH:CH, R<sub>2</sub> = 2-pyrimidyl) in rats following i.p. administration, revealed in vivo hydrolysis and acetylation to generate the acetylated sulfanilamide. I had bactericidal, but not fungicidal activity in a standardized disk test.

IT 111456-11-2P 141502-02-5P 141502-03-6P  
 141502-04-7P 141502-05-8P 141502-06-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and antimicrobial activity of)

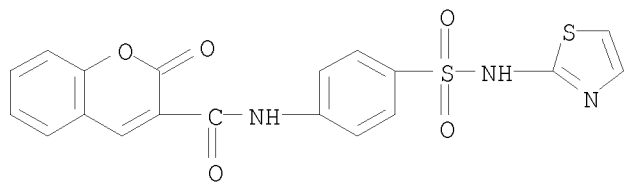
RN 111456-11-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-[4-(aminosulfonyl)phenyl]-2-oxo- (CA INDEX NAME)



RN 141502-02-5 CAPLUS

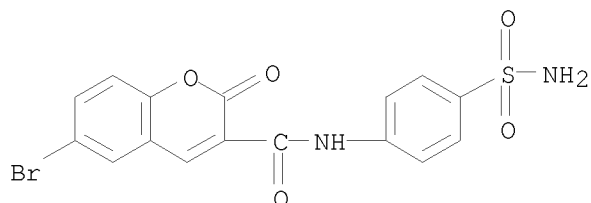
10/513699

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-[(2-thiazolylamino)sulfonyl]phenyl]- (CA INDEX NAME)



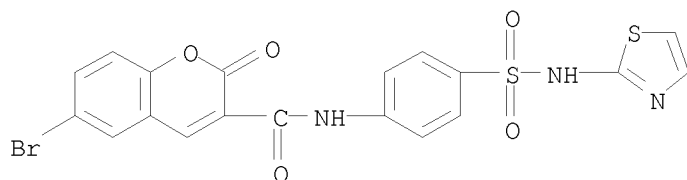
RN 141502-03-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(aminosulfonyl)phenyl]-6-bromo-2-oxo- (CA INDEX NAME)



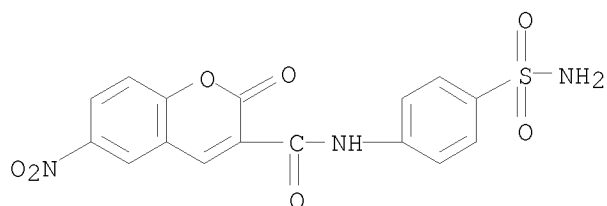
RN 141502-04-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[4-[(2-thiazolylamino)sulfonyl]phenyl]- (CA INDEX NAME)



RN 141502-05-8 CAPLUS

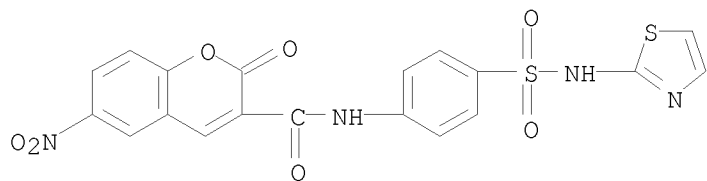
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(aminosulfonyl)phenyl]-6-nitro-2-oxo- (CA INDEX NAME)



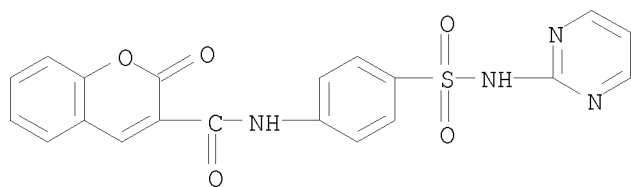
RN 141502-06-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-[4-[(2-thiazolylamino)sulfonyl]phenyl]- (CA INDEX NAME)

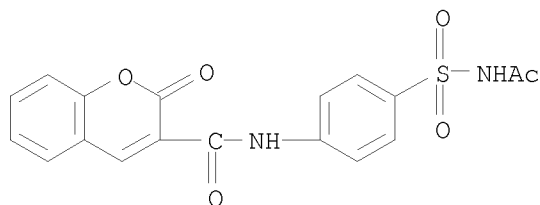
10/513699



IT 141502-01-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and in vivo metabolism of)  
RN 141502-01-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-[(2-  
pyrimidinylamino)sulfonyl]phenyl]- (CA INDEX NAME)



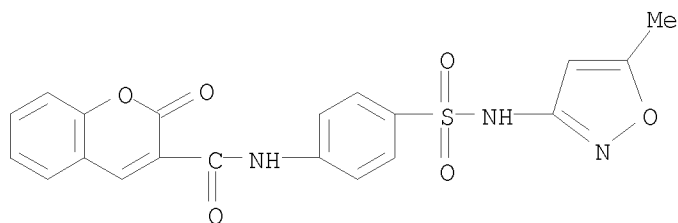
IT 141501-93-1P 141501-94-2P 141501-95-3P  
141501-96-4P 141501-97-5P 141501-98-6P  
141501-99-7P 141502-00-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 141501-93-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-2-oxo-  
(CA INDEX NAME)



RN 141501-94-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(5-methyl-3-  
isoxazolyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)

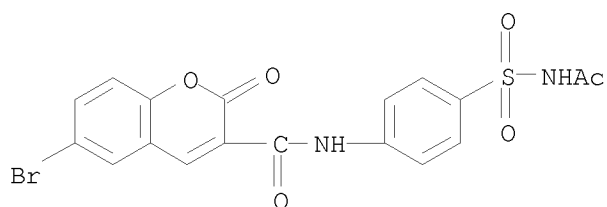


10/513699



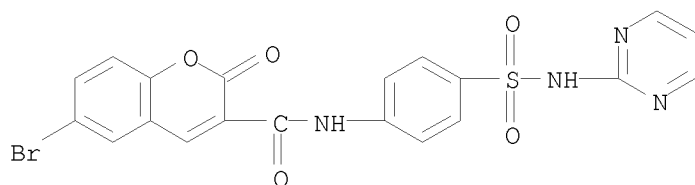
RN 141501-95-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-6-bromo-2-oxo- (CA INDEX NAME)



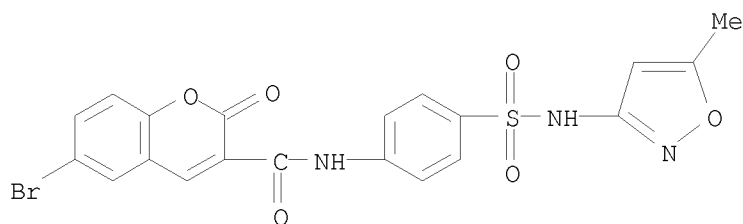
RN 141501-96-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[4-[(2-pyrimidinylamino)sulfonyl]phenyl]- (CA INDEX NAME)



RN 141501-97-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-[4-[(5-methyl-3-isoxazolyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



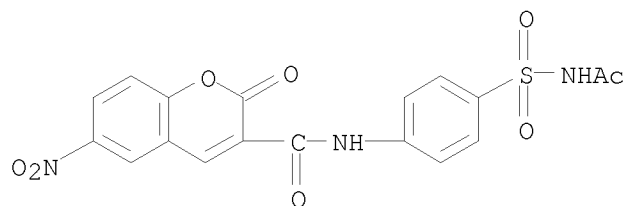
RN 141501-98-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-6-nitro-2-oxo- (CA INDEX NAME)

<12/04/2007>

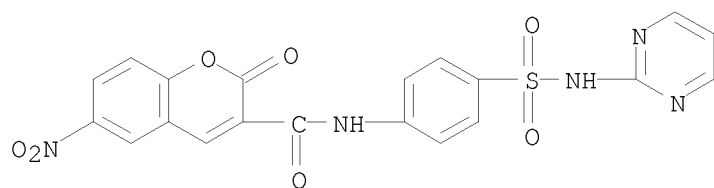
Erich Leese

10/513699



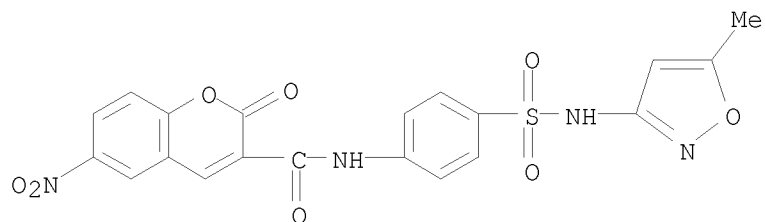
RN 141501-99-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-[4-[(2-pyrimidinylamino)sulfonyl]phenyl]- (CA INDEX NAME)



RN 141502-00-3 CAPLUS

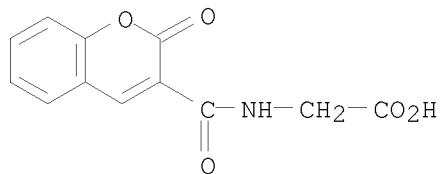
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(5-methyl-3-isoxazolyl)amino]sulfonyl]phenyl]-6-nitro-2-oxo- (CA INDEX NAME)



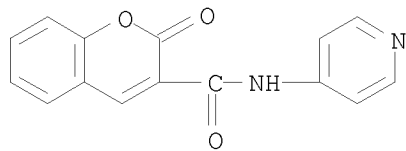
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(8 CITINGS)

L9 ANSWER 167 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1992:166246 CAPLUS  
 DOCUMENT NUMBER: 116:166246  
 ORIGINAL REFERENCE NO.: 116:27883a, 27886a  
 TITLE: Coumarin derivatives displaying antiallergenic activity  
 INVENTOR(S): Oganesyan, E. T.; Gushchin, I. S.; Simonyan, A. V.; Saraf, A. S.; Popov, A. N.  
 PATENT ASSIGNEE(S): Pyatigorsk Pharmaceutical Institute, USSR  
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1991, (31), 253.  
 CODEN: URXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1466217	A1	19910823	SU 1987-4288068	19870721 <--
PRIORITY APPLN. INFO.:			SU 1987-4288068	19870721
AB Substituted amide derivs. of coumarin display antiallergenic activity. Four derivs. are presented.				
IT 57601-45-3	139964-77-5	139964-78-6		
139964-79-7				
RL: BIOL (Biological study) (allergy inhibitor)				
RN 57601-45-3	CAPLUS			
CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)				

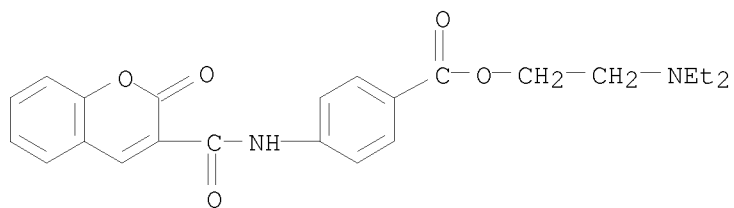


RN 139964-77-5 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-4-pyridinyl- (CA INDEX NAME)



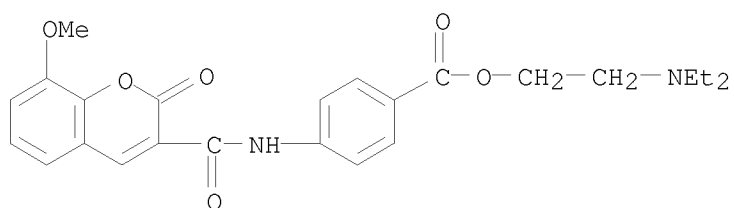
RN 139964-78-6 CAPLUS  
 CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)

10/513699



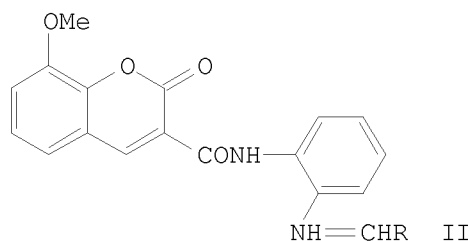
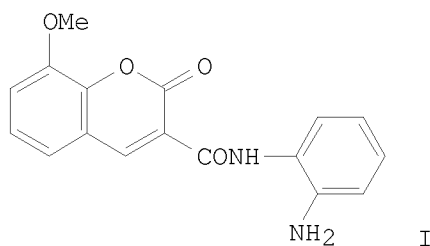
RN 139964-79-7 CAPLUS

CN Benzoic acid, 4-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(diethylamino)ethyl ester (CA INDEX NAME)



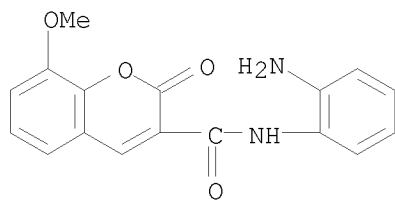
10/513699

L9 ANSWER 168 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1992:106035 CAPLUS  
DOCUMENT NUMBER: 116:106035  
ORIGINAL REFERENCE NO.: 116:17947a,17950a  
TITLE: Synthesis of some new Schiff bases from  
8-methoxycoumarin-3-carboxy(o-amino)anilide as  
possible antibacterial agents  
AUTHOR(S): Vyas, Rajeev R.; Mehta, R. H.  
CORPORATE SOURCE: Fac. Sci., MS Univ. Baroda, Baroda, 390 002, India  
SOURCE: Journal of the Indian Chemical Society (1991  
, 68(5), 294-5  
CODEN: JICSAH; ISSN: 0019-4522  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 116:106035  
GI



AB Aminophenylmethoxycoumarincarboxamide I condensed with RCHO (R = aryl, furfuryl) to give 55-90% Schiff bases II. A screen of II for bactericidal activity found them inactive.  
IT 119686-24-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of, with aldehydes)  
RN 119686-24-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminophenyl)-8-methoxy-2-oxo- (CA INDEX NAME)

10/513699



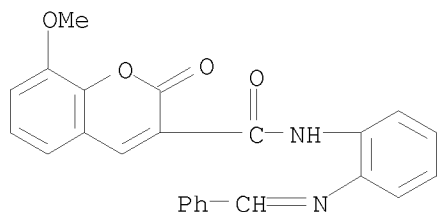
IT 139121-10-1P 139121-15-6P 139121-16-7P  
139121-18-9P 139121-19-0P 139121-20-3P  
139121-21-4P 139121-22-5P 139121-25-8P  
139121-27-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and bactericidal activity of)

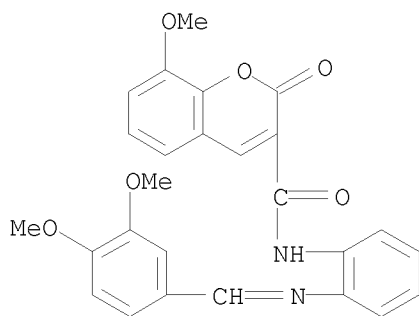
RN 139121-10-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo-N-[2-[(phenylmethylene)amino]phenyl]- (CA INDEX NAME)



RN 139121-15-6 CAPLUS

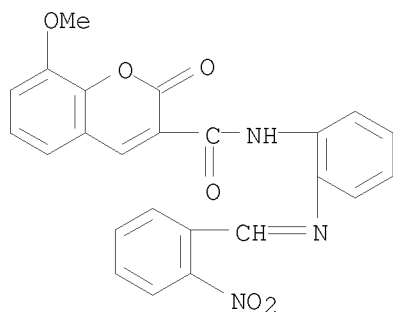
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(3,4-dimethoxyphenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



RN 139121-16-7 CAPLUS

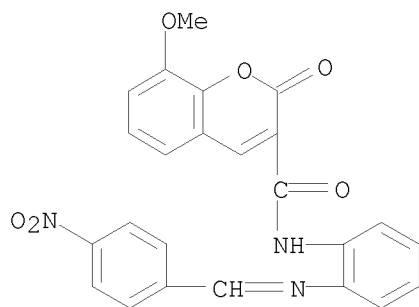
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[(2-nitrophenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)

10/513699



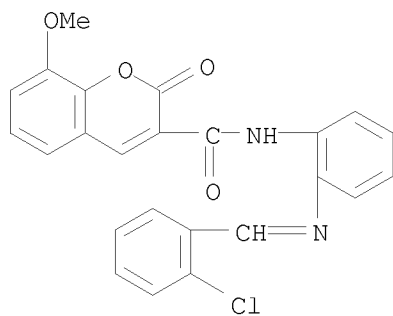
RN 139121-18-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[(4-nitrophenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)



RN 139121-19-0 CAPLUS

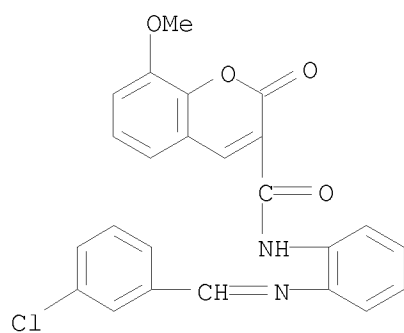
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(2-chlorophenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



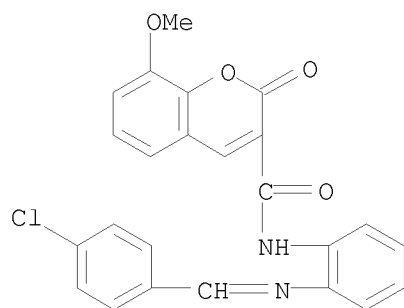
RN 139121-20-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(3-chlorophenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)

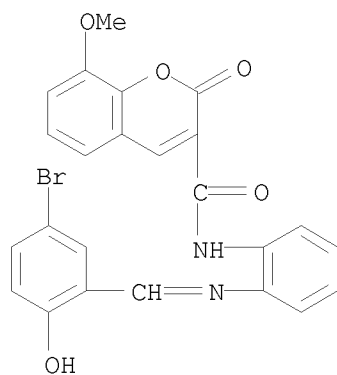
10/513699



RN 139121-21-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(4-chlorophenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



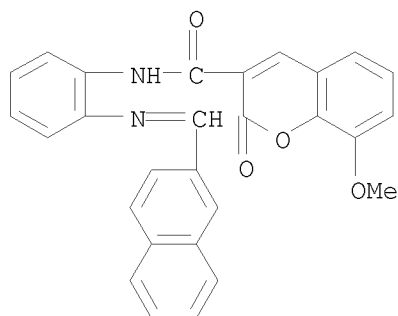
RN 139121-22-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(5-bromo-2-hydroxyphenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



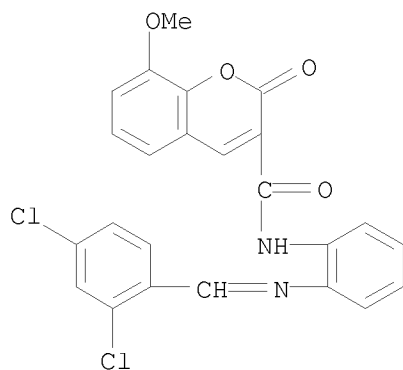
RN 139121-25-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[(2-naphthalenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)



10/513699

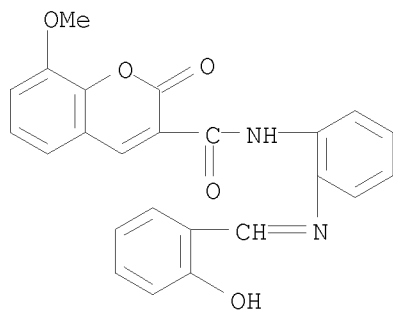


RN 139121-27-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[2,4-dichlorophenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



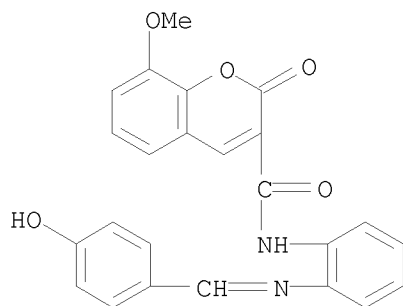
IT 139121-11-2P 139121-12-3P 139121-13-4P  
139121-14-5P 139121-17-8P 139121-23-6P  
139121-24-7P 139121-26-9P 139121-28-1P  
139121-29-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 139121-11-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[2-hydroxyphenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)

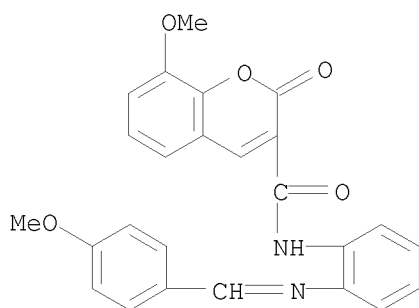


10/513699

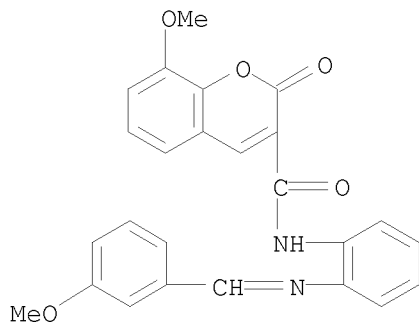
RN 139121-12-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[4-hydroxyphenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



RN 139121-13-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[[4-methoxyphenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)



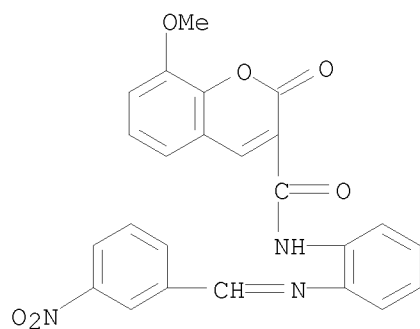
RN 139121-14-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[[3-methoxyphenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)



RN 139121-17-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[[3-

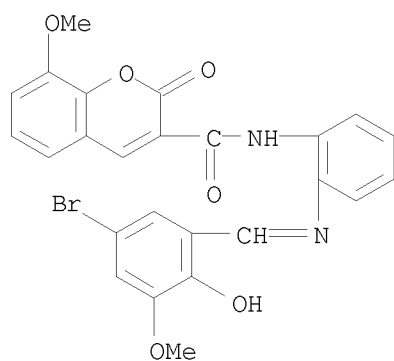
10/513699

nitrophenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)



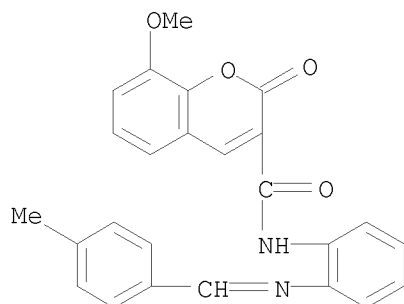
RN 139121-23-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[5-bromo-2-hydroxy-3-methoxyphenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



RN 139121-24-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-[2-[[4-methylphenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)

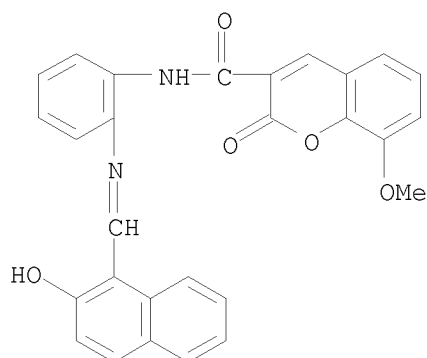


RN 139121-26-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[2-hydroxy-1-

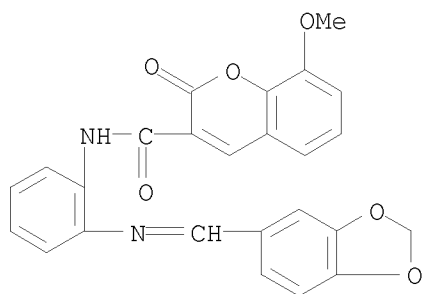
10/513699

naphthalenyl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



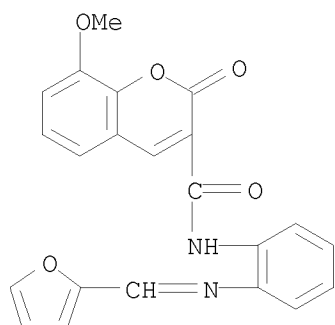
RN 139121-28-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(1,3-benzodioxol-5-yl)methylene]amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



RN 139121-29-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(2-furanylmethylene)amino]phenyl]-8-methoxy-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 3

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

<12/04/2007>

Erich Leese

10/513699

<12/04/2007>

Erich Leese

L9 ANSWER 169 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1991:679818 CAPLUS  
 DOCUMENT NUMBER: 115:279818  
 ORIGINAL REFERENCE NO.: 115:47547a,47550a  
 TITLE: Preparation of piperidine derivatives as neurokinin  
 and substance P antagonists  
 INVENTOR(S): Emonds-Alt, Xavier; Goulaouic, Pierre; Proietto,  
 Vincenzo; Van Broeck, Didier  
 PATENT ASSIGNEE(S): SANOFI, Fr.  
 SOURCE: Eur. Pat. Appl., 84 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
-----	----	-----	-----	-----	
EP 428434	A2	19910522	EP 1990-403125	19901106	<--
EP 428434	A3	19911009			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE					
FR 2654100	A1	19910510	FR 1989-14517	19891106	<--
FR 2654100	B1	19920221			
FR 2663329	A1	19911220	FR 1990-7534	19900615	<--
FR 2663329	B1	19921016			
FI 97540	B	19960930	FI 1990-5444	19901102	<--
FI 97540	C	19970110			
CA 2029275	A1	19910507	CA 1990-2029275	19901105	<--
NO 9004802	A	19910507	NO 1990-4802	19901105	<--
NO 177299	B	19950515			
NO 177299	C	19950823			
AU 9065838	A	19910523	AU 1990-65838	19901105	<--
AU 649973	B2	19940609			
HU 56543	A2	19910930	HU 1990-7027	19901105	<--
US 5317020	A	19940531	US 1990-610093	19901105	<--
IL 111292	A	19960331	IL 1990-111292	19901105	<--
RU 2084453	C1	19970720	RU 1990-4831627	19901105	<--
RU 2114828	C1	19980710	RU 1993-45020	19901105	<--
ZA 9008881	A	19910828	ZA 1990-8881	19901106	<--
JP 03206086	A	19910909	JP 1990-300929	19901106	<--
PL 165758	B1	19950228	PL 1990-293823	19901106	<--
PL 165854	B1	19950228	PL 1990-293824	19901106	<--
PL 166565	B1	19950630	PL 1990-287644	19901106	<--
PL 166582	B1	19950630	PL 1990-303827	19901106	<--
IL 96241	A	19960331	IL 1990-96241	19901115	<--
LV 10713	B	19951020	LV 1993-142	19930225	<--
US 5686609	A	19971111	US 1994-208672	19940311	<--
AU 9459245	A	19940602	AU 1994-59245	19940331	<--
AU 668018	B2	19960418			
NO 9500239	A	19910507	NO 1995-239	19950123	<--
NO 180193	B	19961125			
NO 180193	C	19970305			
NO 9500240	A	19910507	NO 1995-240	19950123	<--
NO 179580	B	19960729			
NO 179580	C	19961106			
US 5618938	A	19970408	US 1995-479634	19950607	<--
FI 9502956	A	19950615	FI 1995-2956	19950615	<--

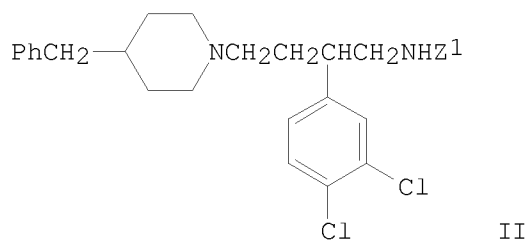
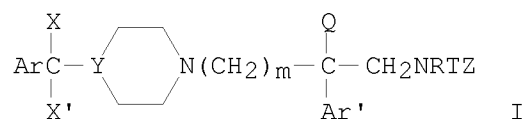
10/513699

FI 9502957	A	19950615	FI 1995-2957	19950615 <--
FI 9800227	A	19980202	FI 1998-227	19980202 <--
PRIORITY APPLN. INFO.:			FR 1989-14517	A 19891106
			FR 1990-7534	A 19900615
			FI 1990-5444	A 19901102
			NO 1990-4802	A 19901105
			US 1990-610093	A3 19901105
			IL 1990-96241	A3 19901115
			US 1994-208672	A3 19940311
			FI 1995-2956	A 19950615

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 115:279818

GI



AB The title compds. I [ $m = 1-3$ ; Ar, Ar' = thienyl, (substituted) Ph, etc.; X = H; X' = H, OH; or XX' = oxo, dialkylaminoalkyloxyimino, etc.; Y = N, CX''; X'' = H or X'X'' = carbon-carbon bond; Q = H, alkyl, (CH<sub>2</sub>)<sub>q</sub>Am'; q = 2 or 3; Am' = piperidino, 4-benzylpiperidino, etc.; R = H, Me, (CH<sub>2</sub>)<sub>n</sub>L; n = 2-6; L = H, amino; T = CO, C(W)NH; W = O, S; Z = H, M, or OM when T = CO; or Z = M when T = C(W)NH; M = H, alkyl, (substituted) phenylalkyl, etc.] were prepared I are neurokinin and substance P antagonists (no data). Reaction of amine II (Z1 = H) with 2,4-dichlorobenzoyl chloride in the presence of Et<sub>3</sub>N gave II (Z1 = 2,4-dichlorobenzoyl) isolated as its HCl salt. I are also useful as allergy and inflammation inhibitors (no data).

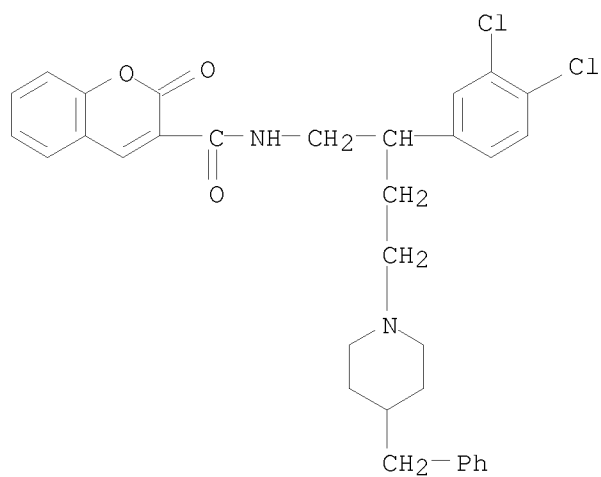
IT 135935-89-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as neurokinin antagonist)

RN 135935-89-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-(phenylmethyl)-1-piperidinyl]butyl]-2-oxo-, hydrochloride (1:1) (CA INDEX NAME)

10/513699



● HCl

OS.CITING REF COUNT: 70 THERE ARE 70 CAPLUS RECORDS THAT CITE THIS  
RECORD (75 CITINGS)

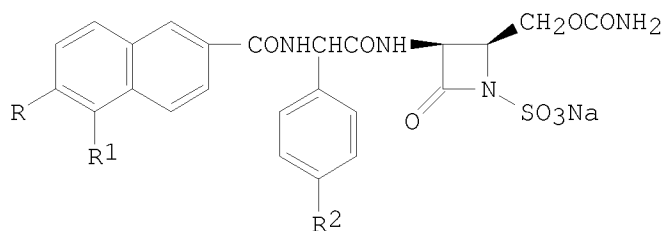
<12/04/2007>

Erich Leese



10/513699

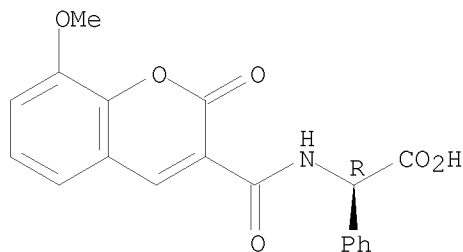
L9 ANSWER 170 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1991:514203 CAPLUS  
DOCUMENT NUMBER: 115:114203  
ORIGINAL REFERENCE NO.: 115:19573a,19576a  
TITLE: Synthesis and antibacterial activity of sodium  
(3S,4S)-3-amino-4-[(carbamoyloxy)methyl]-2-azetidinone-  
1-sulfonate derivatives  
AUTHOR(S): Xu, Xiyin; Gao, Jinsheng; Hua, Weiyi  
CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing,  
210009, Peop. Rep. China  
SOURCE: Zhongguo Yaoke Daxue Xuebao (1990), 21(5),  
257-60  
CODEN: ZHYXE9; ISSN: 1000-5048  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI



I

AB Title compds., e.g. I (R, R<sub>1</sub> = H, MeO; R<sub>2</sub> = H, OH), were prepared by  
N-acylation of sodium 3-amino-2-azetidinonesulfonate derivative I showed  
bactericidal activity inferior to that of aztreonam.  
IT 134225-99-3P 134226-00-9P 134226-01-0P  
134226-02-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and amidation of, with aminoazetidinone)  
RN 134225-99-3 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

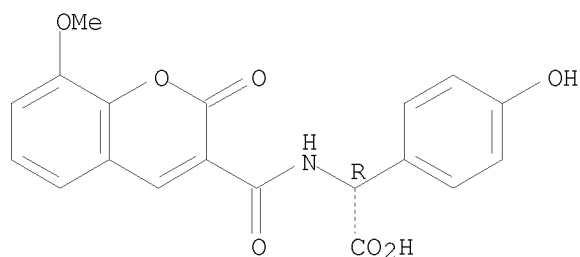
Absolute stereochemistry.



RN 134226-00-9 CAPLUS  
CN Benzeneacetic acid, 4-hydroxy- $\alpha$ -[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

10/513699

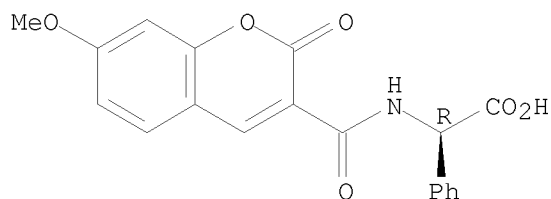
Absolute stereochemistry.



RN 134226-01-0 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

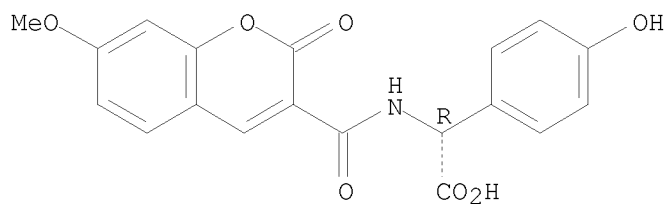
Absolute stereochemistry.



RN 134226-02-1 CAPLUS

CN Benzeneacetic acid, 4-hydroxy- $\alpha$ -[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 134225-93-7P 134225-94-8P 134225-95-9P  
134225-96-0P 134309-09-4P 134309-10-7P  
134309-11-8P 134309-12-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and bactericidal activity of)

RN 134225-93-7 CAPLUS

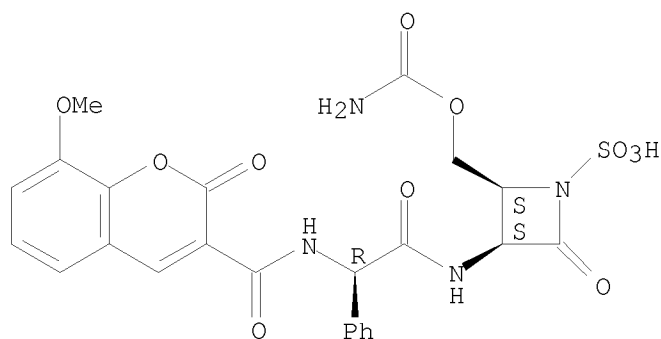
CN 1-Azetidinesulfonic acid, 2-[[ (aminocarbonyl)oxy]methyl]-3-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-4-oxo-, monosodium salt, [2S-[2 $\alpha$ ,3 $\alpha$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

<12/04/2007>

Erich Leese

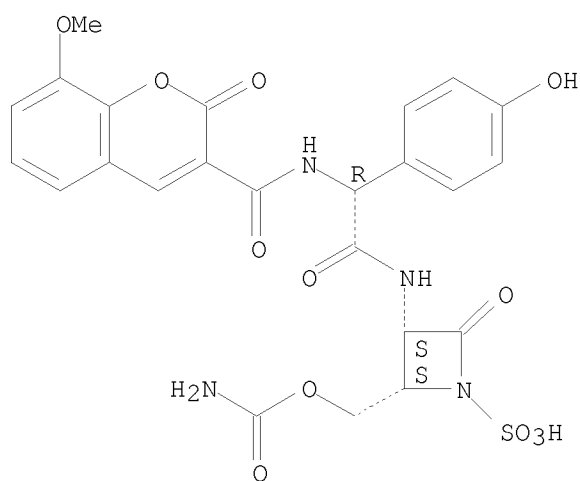
10/513699



● Na

RN 134225-94-8 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-[[[(aminocarbonyl)oxy]methyl]-3-[[4-(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-4-oxo-, monosodium salt, [2S-[2α,3α(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na

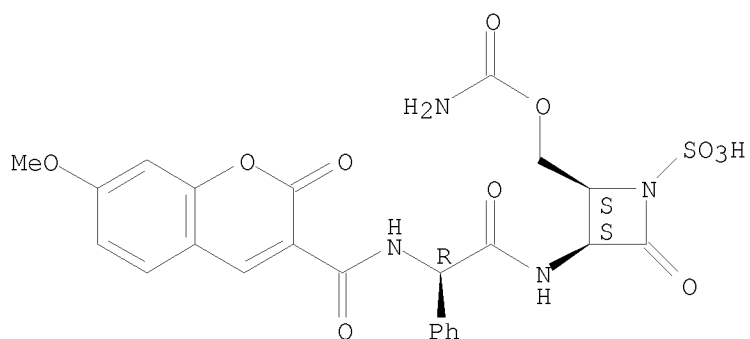
RN 134225-95-9 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-[[[(aminocarbonyl)oxy]methyl]-3-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-4-oxo-, monosodium salt, [2S-[2α,3α(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

<12/04/2007>

Erich Leese

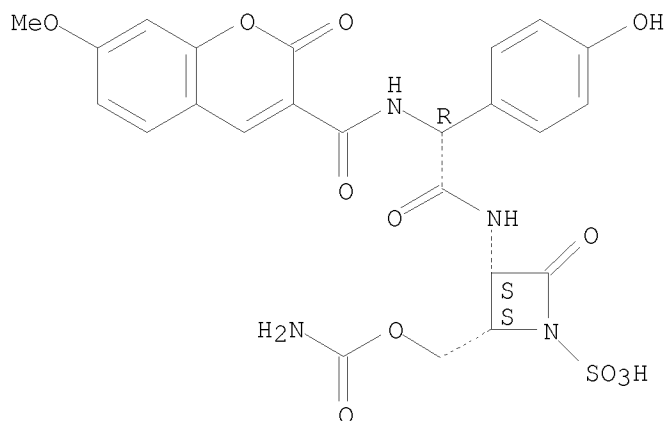
10/513699



● Na

RN 134225-96-0 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-[[[(aminocarbonyl)oxy]methyl]-3-[[[(4-hydroxyphenyl) [[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-4-oxo-, monosodium salt, [2S-[2α,3α(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

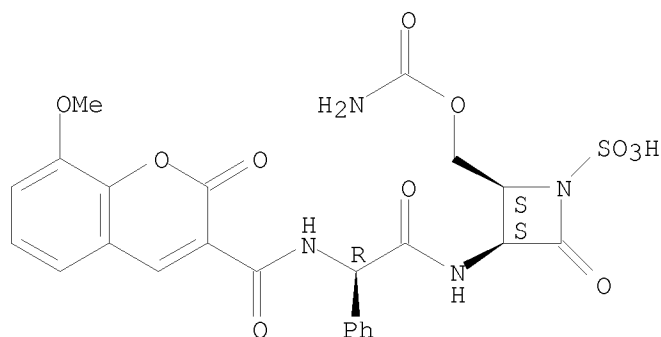


● Na

RN 134309-09-4 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-[[[(aminocarbonyl)oxy]methyl]-3-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-4-oxo-, [2S-[2α,3α(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

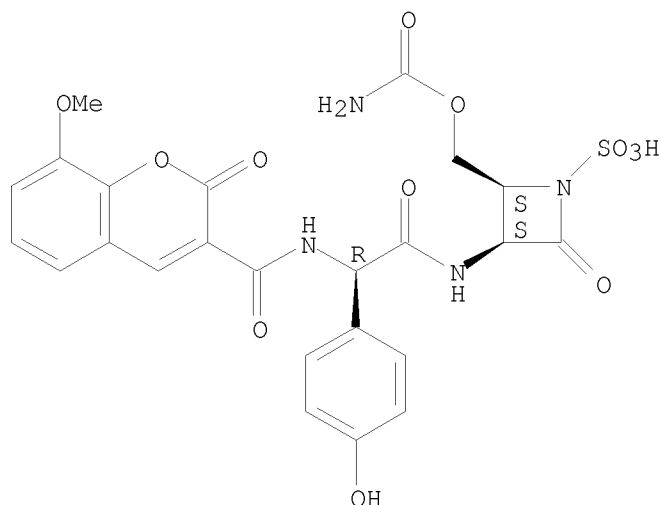
10/513699



RN 134309-10-7 CAPLUS

CN 1-Azetidinesulfonic acid, 2-[[[(aminocarbonyl)oxy]methyl]-3-[[4-hydroxyphenyl][[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-4-oxo-, [2S-[2α,3α(S\*)]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

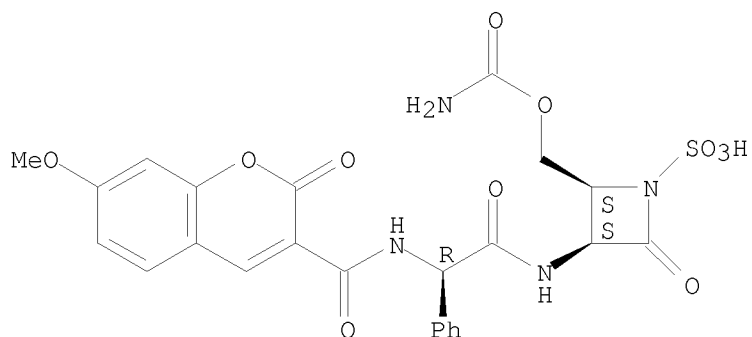


RN 134309-11-8 CAPLUS

CN 1-Azetidinesulfonic acid, 2-[[[(aminocarbonyl)oxy]methyl]-3-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-4-oxo-, [2S-[2α,3α(S\*)]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

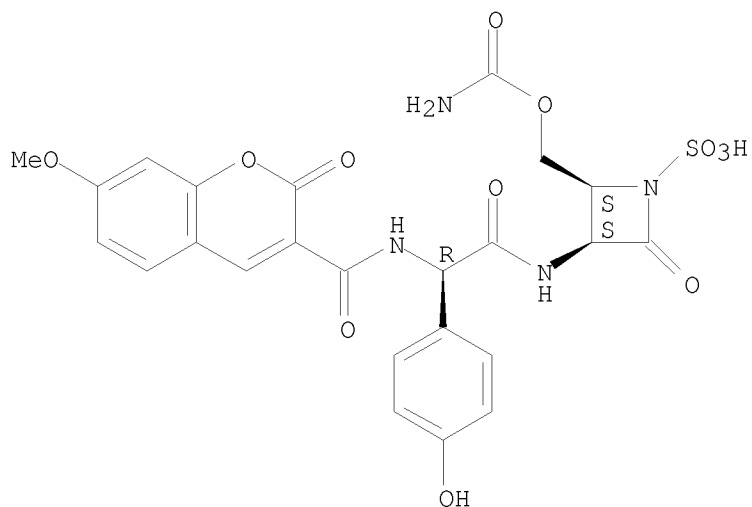
10/513699



RN 134309-12-9 CAPLUS

CN 1-Azetidinesulfonic acid, 2-[[ (aminocarbonyl)oxy]methyl]-3-[[ (4-hydroxyphenyl) [[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-4-oxo-, [2S-[2 $\alpha$ ,3 $\alpha$ (S\*)]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



<12/04/2007>

Erich Leese

L9 ANSWER 171 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:492078 CAPLUS

DOCUMENT NUMBER: 115:92078

ORIGINAL REFERENCE NO.: 115:15839a,15842a

TITLE: Preparation of N-benzylpiperidine compounds as antiarrhythmics

INVENTOR(S): Desai, Bipinchandra Nanubhai; Fowler, Kerry Wallace; Moormann, Allan Edward; Russell, Mark Andrew

PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 416581	A1	19910313	EP 1990-117085	19900905 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5028616	A	19910702	US 1989-402951	19890905 <--
US 5098915	A	19920324	US 1989-403205	19890905 <--
US 5210090	A	19930511	US 1990-571911	19900827 <--
CA 2024581	A1	19910306	CA 1990-2024581	19900904 <--
JP 03169860	A	19910723	JP 1990-235492	19900905 <--
PRIORITY APPLN. INFO.:			US 1989-402951	A 19890905
			US 1989-403205	A 19890905
			US 1990-571911	A 19900827

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 115:92078; MARPAT 115:92078

GI For diagram(s), see printed CA Issue.

AB Title compds. [I; R1 = (substituted) alkenyl, alkynyl, aralkenyl, aralkynyl, aryl, benzofuranyl, etc.; R2 = C1-10 alkyl, (substituted) aryl, etc.; R3 = H, carboxalkyl, alkoxycarbonylalkyl; X = H, cycloalkyl, (substituted) Ph, pyridyl, furyl, etc.; n = 1-10] are prepared

Hydrogenation of 4-acetamidopyridine acetate gave piperidine acetate II, which was hydrogenated with 4-MeOC6H4CHO in EtOH over PtO2 to give benzyl derivative II (R = Ac) (IV). Hydrolysis of IV in HCl gave aniline III (R = H), which was acetylated and then quaternized to give quaternary salt V. Also prepared were 102 addnl. I salts, which at 3 + 10<sup>-5</sup>M showed an increase in ventricular refractory period of 25-155 ms in isolated ventricular papillary muscle.

IT 135385-56-7P

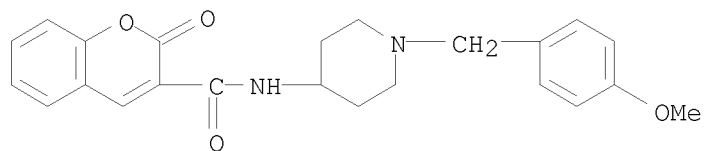
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as antiarrhythmic agent)

RN 135385-56-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[1-[(4-methoxyphenyl)methyl]-4-piperidinyl]-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (15 CITINGS)



L9 ANSWER 172 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:449507 CAPLUS

DOCUMENT NUMBER: 115:49507

ORIGINAL REFERENCE NO.: 115:8593a,8596a

TITLE: Fluorescent markers for hypoxic cells: a study of nitroaromatic compounds, with fluorescent heterocyclic side chains, that undergo bioreductive binding

AUTHOR(S): Hodgkiss, Richard J.; Jones, Gareth W.; Long, Anthony; Middleton, Richard W.; Parrick, John; Stratford, Michael R. L.; Wardman, Peter; Wilson, George D.

CORPORATE SOURCE: Gray Lab. Cancer Res. Campaign, Northwood/Middlesex, HA6 2JR, UK

SOURCE: Journal of Medicinal Chemistry (1991), 34(7), 2268-74

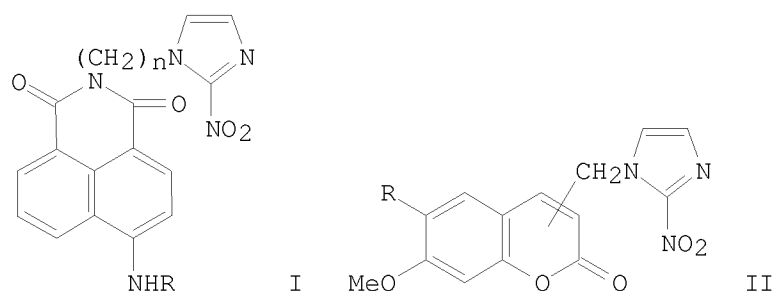
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:49507

GI



AB Several novel title compds. e.g., I ( $R = H$ ,  $n = 3, 5, 9$ ;  $R = Ac$ ,  $n = 3$ ) and II ( $R = H$ ,  $MeO$ ) having both a 2-nitroimidazole nucleus and a fluorescent ring system in their mol. structure were prepared and evaluated as potential fluorescent probes for hypoxia. Bioredn. of nitroimidazoles, which is inhibited by oxygen, is known to lead to binding of bioreductive metabolites to cellular macromols. and this provides a mechanism for binding the fluorescent moiety to hypoxic cells. These compds. can incorporate a wide range of fluorophors and can therefore be designed to suit the laser-line wavelengths available for excitation of fluorescence in the flow cytometer. Several nitroimidazoles with naphthalimide side chains were rapidly taken up into cells and became concentrated in the cells, thus reducing their concentration in the extracellular medium. This suggests a potential microscopic bioavailability problem with probes of this type when used in vivo as they would become progressively depleted in the extracellular fluid as they diffused from blood vessels, through layers of packed cells in tumors, to the hypoxic cells where they could undergo hypoxia-specific metabolism

IT 133932-18-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

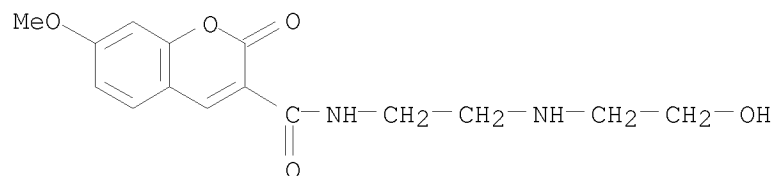
(preparation and alkylation by, of bis(hydroxyethyl)propanediamine)

RN 133932-18-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(2-hydroxyethyl)amino]ethyl]-7-

10/513699

methoxy-2-oxo- (CA INDEX NAME)

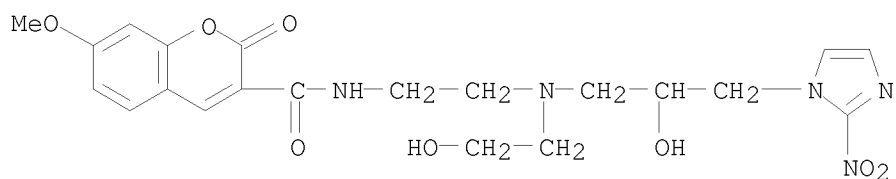


IT 133932-19-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as fluorescent marker for hypoxic cells)

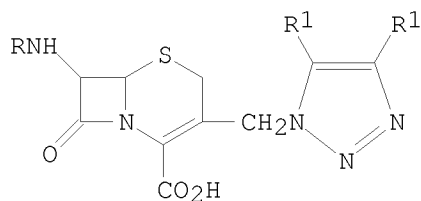
RN 133932-19-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(2-hydroxyethyl)amino]ethyl]-7-methoxy-2-oxo-  
1H-imidazol-1-yl)propyl]amino]ethyl]-7-methoxy-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS  
RECORD (20 CITINGS)

L9 ANSWER 173 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1991:428941 CAPLUS  
 DOCUMENT NUMBER: 115:28941  
 ORIGINAL REFERENCE NO.: 115:5081a,5084a  
 TITLE: Synthesis and antimicrobial activity of  
 7-acylamido-3-(1,2,3-triazol-1-ylmethyl)  
 cephalosporins  
 AUTHOR(S): Zhang, C. Y.; Hu, S. C.; Zhou, H. S.; Duan, T. H.  
 CORPORATE SOURCE: Div. Semisynth. Antibiot., China Pharm. Univ.,  
 Nanjing, 210009, Peop. Rep. China  
 SOURCE: Yaoxue Xuebao (1991), 26(3), 175-82  
 CODEN: YHHPAL; ISSN: 0513-4870  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI

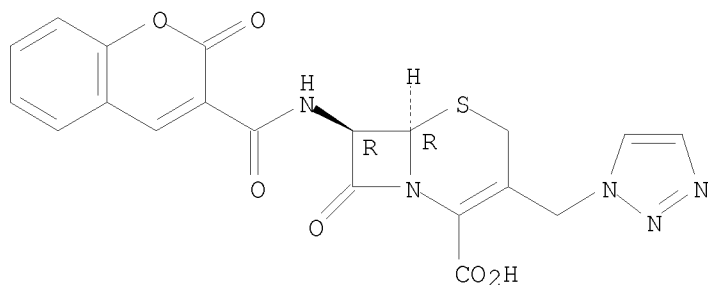


AB Cephalosporins I (R = acyl, R1 = H, CO2Me, CONH2) were synthesized. 7-Phenylacetamido-3-methyl-3-cephem-4-carboxylic acid was employed as starting material and converted to I by procedures of esterification and oxidation, bromination, azide substitution, dipolar cycloaddn., deprotection, cleavage, . and condensation. Min. inhibitory concentration values in vitro showed that I had a wide antibacterial spectrum against Gram pos. and Gram neg. bacteria and possessed high activities.

IT 134641-17-1P 134641-20-6P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and bactericidal activity of)

RN 134641-17-1 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 8-oxo-7-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-(1H-1,2,3-triazol-1-ylmethyl)-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

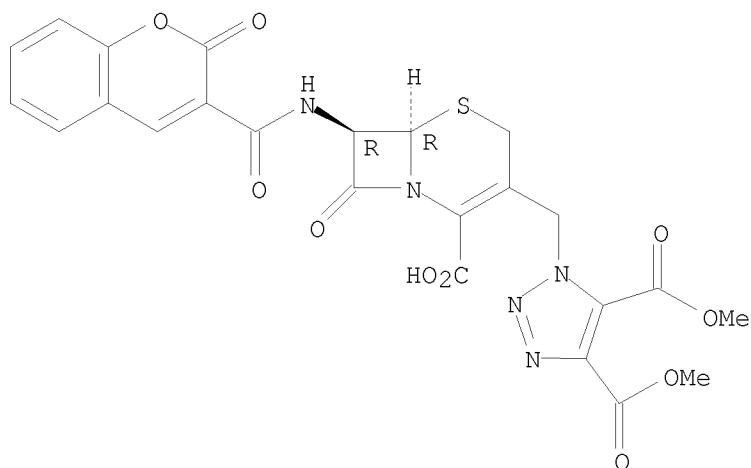


10/513699

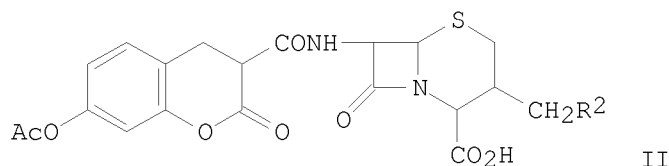
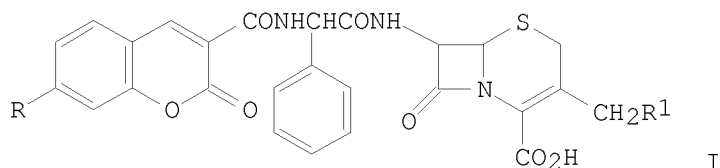
RN 134641-20-6 CAPLUS

CN 1H-1,2,3-Triazole-4,5-dicarboxylic acid,  
1-[[2-carboxy-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-5-thia-  
1-azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-, 4,5-dimethyl ester, (6R-trans)-  
(9CI) (CA INDEX NAME)

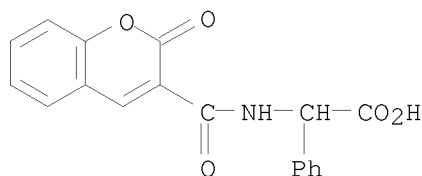
Absolute stereochemistry.



L9 ANSWER 174 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1991:163811 CAPLUS  
 DOCUMENT NUMBER: 114:163811  
 ORIGINAL REFERENCE NO.: 114:27696h,27697a  
 TITLE: Synthesis of 7-[ $\alpha$ -(7-substituted coumarin-3-formamido)phenylacetamido]cephalosporic acids and 7-(7-substituted coumarin-3-formamido)cephalosporic acids  
 AUTHOR(S): Xu, Lian; Duan, Tinghan; Li, Minghua  
 CORPORATE SOURCE: Dep. Med. Chem., China Pharm. Univ., Nanjing, Peop. Rep. China  
 SOURCE: Zhongguo Yaoke Daxue Xuebao (1990), 21(3), 129-33  
 CODEN: ZHYXE9; ISSN: 1000-5048  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI

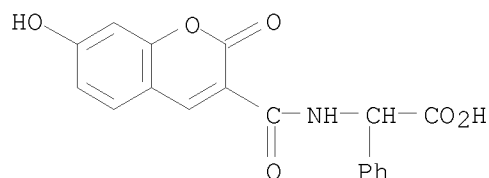


AB Title compound I (R = H, AcO, MeO, HO; R1 = H, AcO, methylthiadiazolylthio, methyltetrazolylthio) and II (R2 = H, AcO, methyltetrazolylthio) were prepared by condensation of coumarincarboxylic acids with aminocephalosporanic acids. I and II showed some activity against Gram-pos. bacteria, but no activity against Gram-neg. bacteria.  
 IT 132968-51-5P 132968-52-6P 132968-53-7P  
 132968-54-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and amidation of, with aminocephalosporanic acid)  
 RN 132968-51-5 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-  
 (CA INDEX NAME)

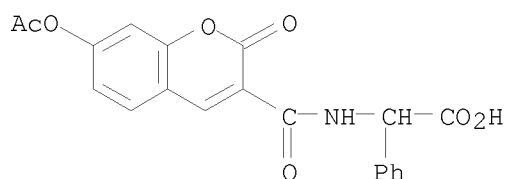


10/513699

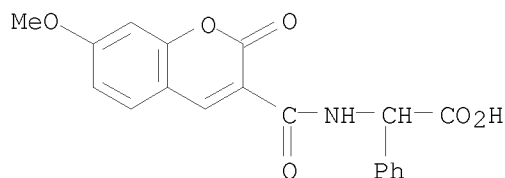
RN 132968-52-6 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



RN 132968-53-7 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)



RN 132968-54-8 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



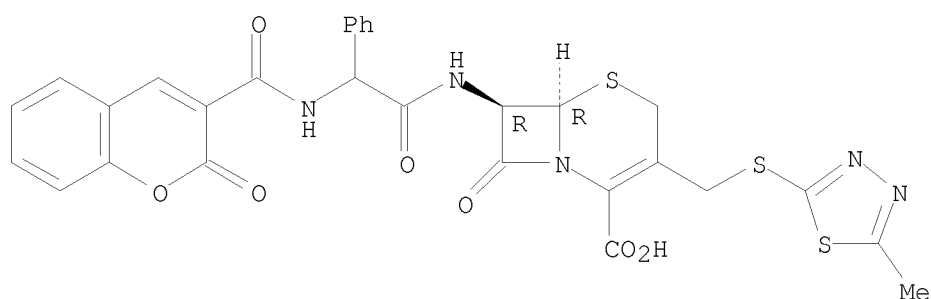
IT 132968-37-7P 132968-38-8P 132968-39-9P  
132968-40-2P 132968-41-3P 132968-42-4P  
132968-43-5P 132968-44-6P 132968-45-7P  
132968-46-8P 132968-47-9P 132968-48-0P  
132968-49-1P 132968-50-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 132968-37-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[ (5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-7-[[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, [6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

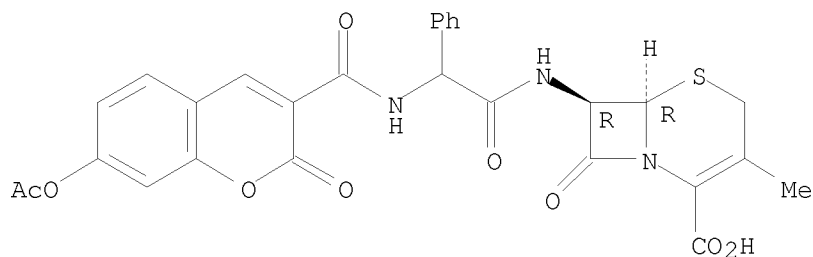
10/513699



RN 132968-38-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]phenylacetyl]amino]-3-methyl-8-oxo-,  
[6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)

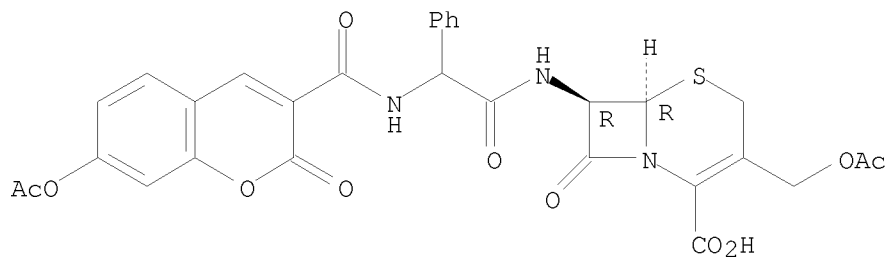
Absolute stereochemistry.



RN 132968-39-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-(6 $\alpha$ , 7 $\beta$ )]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

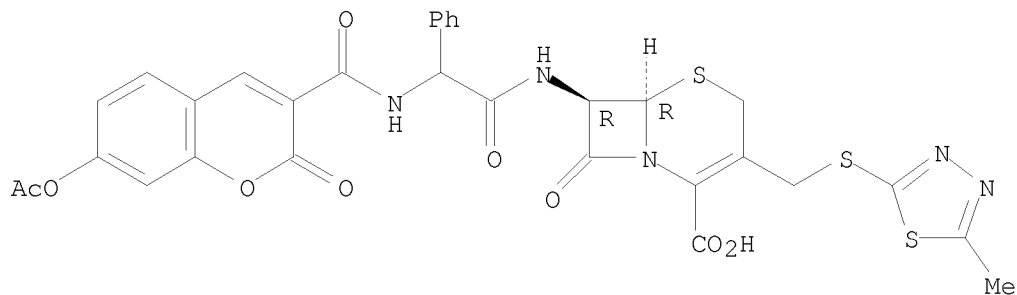


RN 132968-40-2 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]phenylacetyl]amino]-3-[[ (5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, [6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)

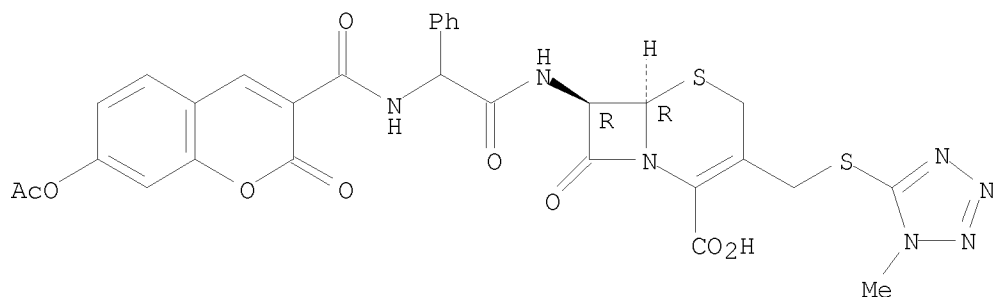
Absolute stereochemistry.

10/513699



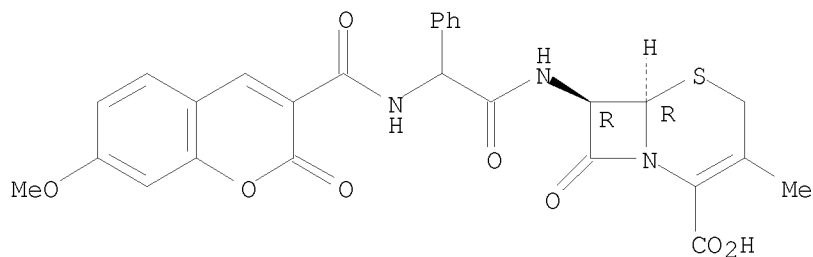
RN 132968-41-3 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[[(7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3-[[ (1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, [6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 132968-42-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3-methyl-8-oxo-, [6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

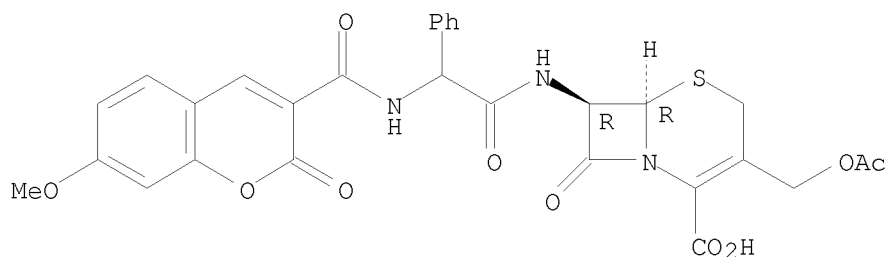


RN 132968-43-5 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)



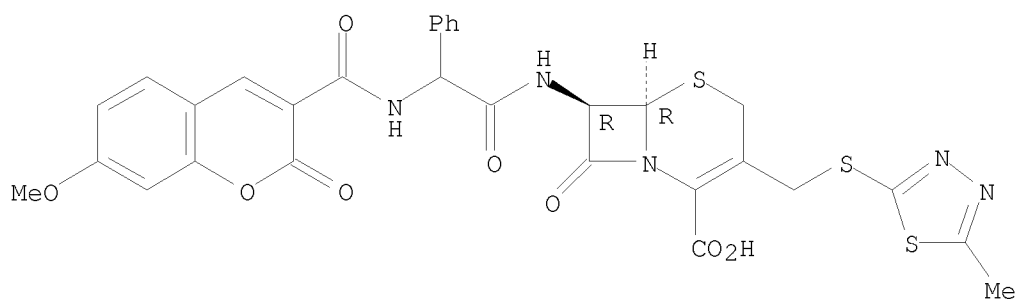
10/513699

Absolute stereochemistry.



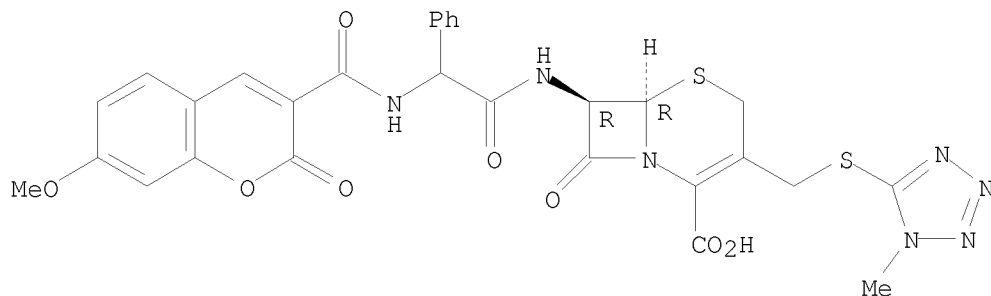
RN 132968-44-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3-[[5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, [6R-(6 $\alpha$ ,7 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 132968-45-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3-[[1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, [6R-(6 $\alpha$ ,7 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

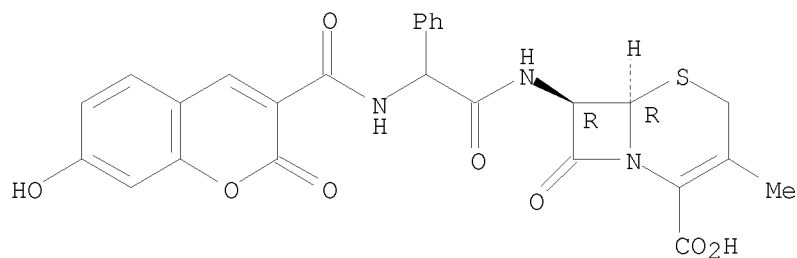


RN 132968-46-8 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-

10/513699

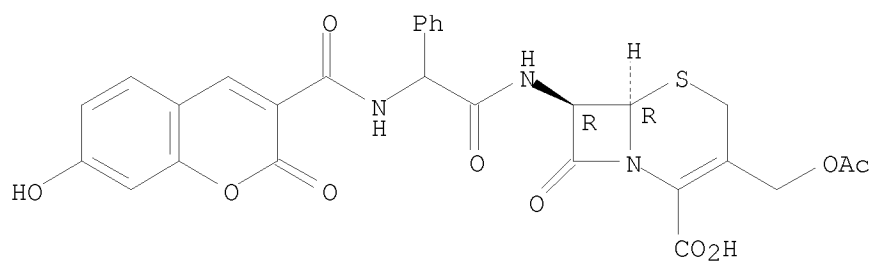
yl)carbonyl]amino]phenylacetyl]amino]-3-methyl-8-oxo-,  
[6R-(6 $\alpha$ , 7 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



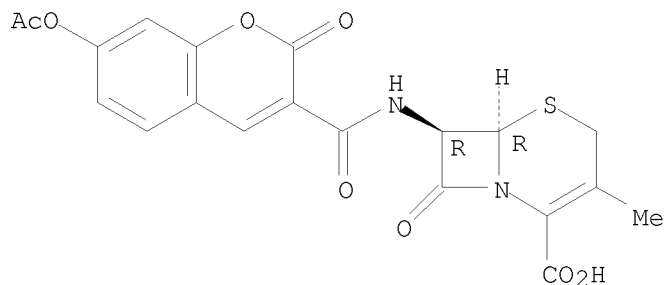
RN 132968-47-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-(6 $\alpha$ , 7 $\beta$ )]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 132968-48-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-3-methyl-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

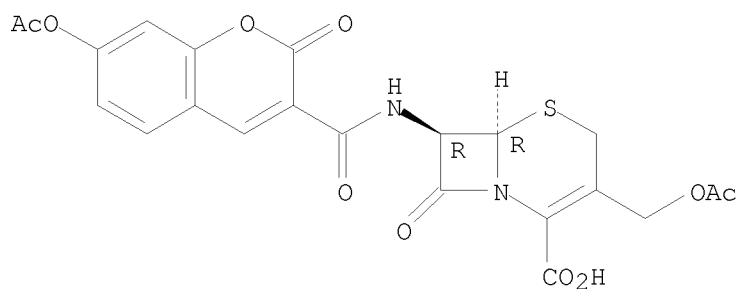


RN 132968-49-1 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-

10/513699

yl]carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

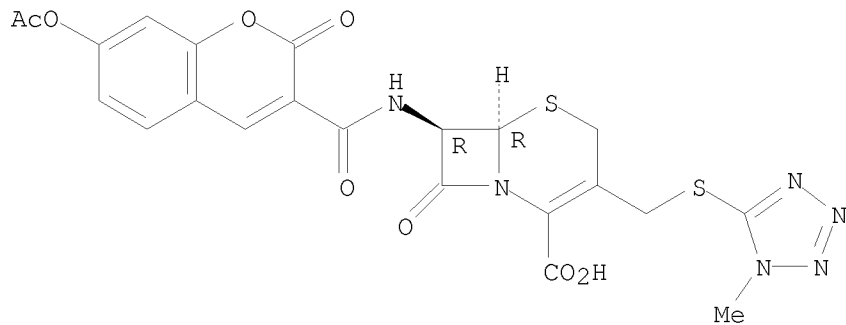
Absolute stereochemistry.



RN 132968-50-4 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-3-[[1-methyl-1H-tetrazol-5-yl]thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 175 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:40526 CAPLUS

DOCUMENT NUMBER: 114:40526

ORIGINAL REFERENCE NO.: 114:7043a,7046a

TITLE: A single-step method for the purification of anti-FITC antibodies by use of a coumarin immunosorbent

AUTHOR(S): Samuel, D.; Abuknesha, R. A.

CORPORATE SOURCE: Div. Microbiol. Reagents Qual. Control, Cent. Public Health Lab., London, NW9 5HT, UK

SOURCE: Journal of Immunological Methods (1990), 133(1), 133-9

CODEN: JIMMBG; ISSN: 0022-1759

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Monoclonal anti-fluorescein isothiocyanate (FITC) antibody cross-reacts with 7-hydroxycoumarin derivs. conjugated to BSA. This property permitted the affinity purification of monoclonal anti-FITC antibodies from ascitic fluid using an immunosorbent consisting of a 7-hydroxycoumarin derivative linked to Sepharose 4B. Ascitic fluid was applied to the immunosorbent column and, after washing, the bound antibody was eluted under extremely mild conditions using 3 M MgCl<sub>2</sub>. Antibody eluted in this manner was >96% pure as assessed by SDS-PAGE. A polyclonal sheep anti-FITC antibody was also purified from serum on the same immunosorbent to >94% purity. This simple and rapid method for the purification of anti-FITC antibodies will find applications in both immunodiagnostic procedures and in studies of hapten-antibody interactions. The affinity constant of the purified monoclonal anti-FITC antibody conjugated to horseradish peroxidase was assessed by ELISA and was found to be  $1.5 \times 10^9$  M<sup>-1</sup>.

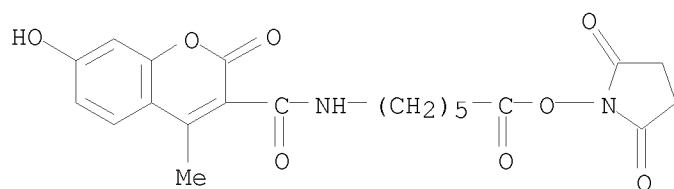
IT 131401-08-6DP, reaction products with Sepharose

RL: PREP (Preparation)

(preparation and monoclonal antibody to FITC purification on)

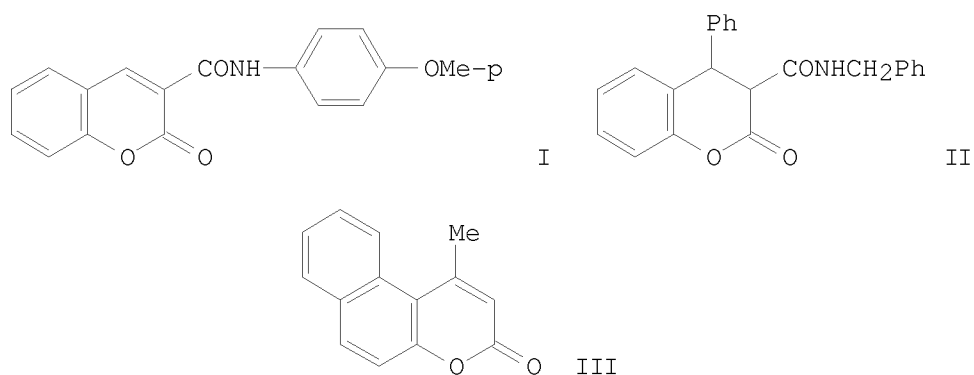
RN 131401-08-6 CAPLUS

CN Hexanoic acid, 6-[[[(7-hydroxy-4-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

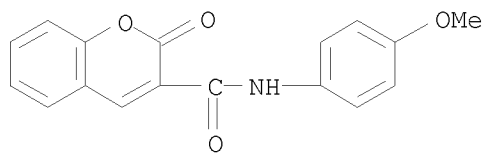


10/513699

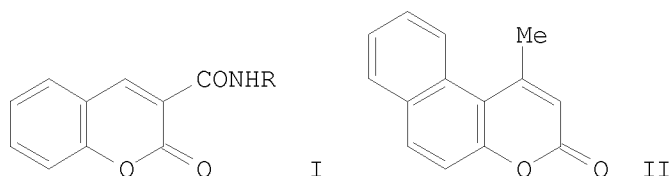
L9 ANSWER 176 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1991:23278 CAPLUS  
DOCUMENT NUMBER: 114:23278  
ORIGINAL REFERENCE NO.: 114:4153a,4156a  
TITLE: Mass spectrometric fragmentation of carbamido- and  
benzocoumarin-derivatives  
AUTHOR(S): El-Farargy, A. F.; El-Mobayed, M.; Bayoumy, B. E.  
CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Egypt  
SOURCE: Bulletin of the Faculty of Science, Assiut University  
(1989), 18(1), 71-5  
CODEN: BSAUDW; ISSN: 0366-4740  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



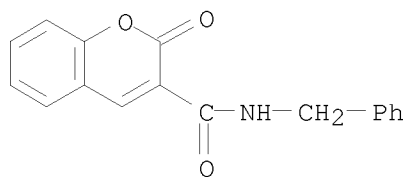
AB Mass spectral data were obtained for coumarin derivs. (I-III).  
Fragmentation patterns were discussed.  
IT 1846-94-2  
RL: PRP (Properties)  
(mass spectrum of)  
RN 1846-94-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



L9 ANSWER 177 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1990:531940 CAPLUS  
 DOCUMENT NUMBER: 113:131940  
 ORIGINAL REFERENCE NO.: 113:22411a, 22414a  
 TITLE: Some reactions of 3-(arylcarbamoyl)coumarins and  
 4-methyl-5,6-benzocoumarin  
 AUTHOR(S): El-Farargy, A. F.; Soliman, A. Y.; El-Mobayed, M.;  
 El-Esser, S.  
 CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt  
 SOURCE: Egyptian Journal of Chemistry (1989), Volume  
 Date 1987, 30(6), 497-505  
 CODEN: EGJCA3; ISSN: 0367-0422  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 113:131940  
 GI

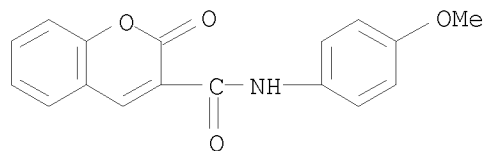


AB The preparation of carbamoylcoumarins I (R = CH<sub>2</sub>Ph, p-anisyl) and their reactions with active methylene compds., ketones, Grignard reagents, and aromatic amines were described. The preparation of 4-methyl-5,6-benzocoumarin (II) and its reactions with aromatic aldehydes were also studied.  
 IT 1846-90-8P, 3-(Benzylcarbamoyl)coumarin 1846-94-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reactions of)  
 RN 1846-90-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



RN 1846-94-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)

10/513699

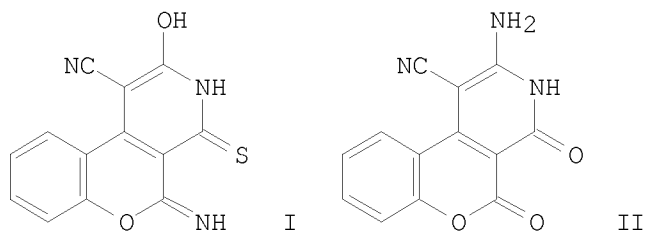


OS.CITING REF COUNT: 1

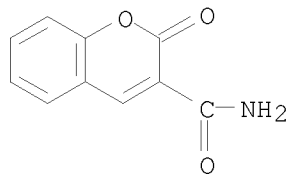
THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 178 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1990:515131 CAPLUS  
DOCUMENT NUMBER: 113:115131  
ORIGINAL REFERENCE NO.: 113:19511a,19514a  
TITLE: Activated nitriles in heterocyclic synthesis. Novel  
synthesis of 5-imino-5H-[1]benzopyrano[3,4-c]pyridine-  
4(3H)-thiones and their oxo analogs  
AUTHOR(S): Elgemeie, Galal E. H.; Elghandour, Ahmed H. H.  
CORPORATE SOURCE: Chem. Dep., Fac. Sci., Bani Suef, Egypt  
SOURCE: Bulletin of the Chemical Society of Japan ( 1990), 63(4), 1230-2  
CODEN: BCSJA8; ISSN: 0009-2673  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 113:115131  
GI



AB Several title compds., e.g., I and II, were prepared by condensation of  
cyanothioacetamide or cyanoacetamide and salicylaldehyde with ketones or  
activated nitriles in the presence of NH4OAC.  
IT 1846-78-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with ketones and nitriles)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS  
RECORD (10 CITINGS)



L9 ANSWER 179 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1990:509300 CAPLUS  
 DOCUMENT NUMBER: 113:109300  
 ORIGINAL REFERENCE NO.: 113:18313a,18316a  
 TITLE: Coumarins to inhibit reverse transcriptase in humans  
 for treatment of human immunodeficiency virus  
 infection  
 INVENTOR(S): Reusser, Fritz; Tarpley, William G.; Dolak, Lester;  
 Althaus, Irene W.  
 PATENT ASSIGNEE(S): Upjohn Co., USA  
 SOURCE: PCT Int. Appl., 11 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

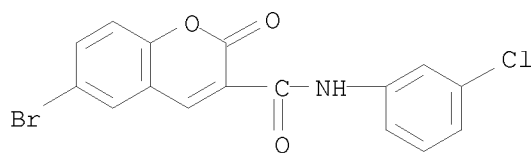
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8907939	A2	19890908	WO 1989-US450	19890208 <--
WO 8907939	A3	19891019		
W: AU, DK, FI, JP, KR, NO, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8940747	A	19890922	AU 1989-40747	19890208 <--
EP 403535	A1	19901227	EP 1989-903438	19890208 <--
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 03503635	T	19910815	JP 1989-503059	19890208 <--
DK 9001956	A	19900816	DK 1990-1956	19900816 <--
PRIORITY APPLN. INFO.:			US 1988-162553	A 19880301
			US 1988-190038	A2 19880504
			WO 1989-US450	A 19890208

AB 6-Bromo-3-[(m-chlorophenyl)carbamoyl]coumarin,  
 6-bromo-3-[( $\alpha,\alpha,\alpha$ -trifluoro-m-toluy)carbamoyl]coumarin,  
 6-bromo-3-[(2,5-dichlorophenyl)carbamoyl]coumarin,  
 [[bis(4-hydroxy-2-oxo-2H-1-benzopyran-3-yl)methyl]cyclopentadienyl]cyclopentadienyliron (I),  
 3-cinnamoyl-4-hydroxycoumarin, hexachlorocoumarin, 7-acetoxycoumarin or  
 [1-(2-oxo-2H-1-benzopyran-3-yl)ethylidene]hydrazinecarboxylic acid  
 phenylmethyl ester or salts thereof, can be used to treat humans infected  
 with human immunodeficiency virus. I (0.1 mM) inhibited reverse  
 transcriptase, in vitro, by 60%. Formulation examples are given.

IT 128171-55-1 128171-56-2 128171-57-3  
 RL: BIOL (Biological study)  
 (human immunodeficiency virus infection treatment by)

RN 128171-55-1 CAPLUS

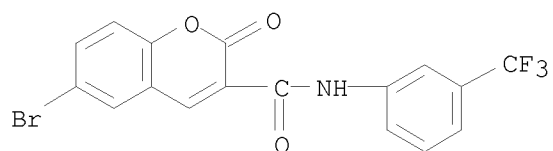
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3-chlorophenyl)-2-oxo- (CA  
 INDEX NAME)



RN 128171-56-2 CAPLUS

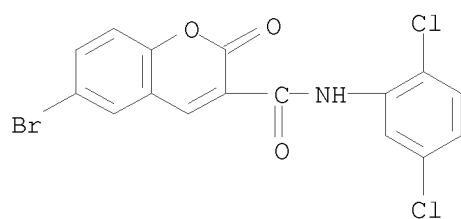
10/513699

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[3-(trifluoromethyl)phenyl]-  
(CA INDEX NAME)



RN 128171-57-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2,5-dichlorophenyl)-2-oxo- (CA  
INDEX NAME)



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS  
RECORD (24 CITINGS)

10/513699

L9 ANSWER 180 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1990:432580 CAPLUS

DOCUMENT NUMBER: 113:32580

ORIGINAL REFERENCE NO.: 113:5439a,5442a

TITLE: Electrical properties of coumarin derivatives

AUTHOR(S): Abd El Wahed, M. Gamal; Hassan, Aly M.; Raafat, Selim

CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt

SOURCE: Chemistry & Industry (London, United Kingdom) (

1990), (8), 263-4

CODEN: CHINAG; ISSN: 0009-3068

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The elec. resistance was determined of 9 coumarin derivs. over a wide temperature

range. At high temps., intrinsic conductivity dominates. Substituent effects are discussed.

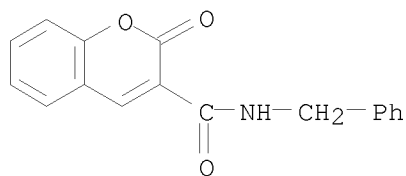
IT 1846-90-8 1846-94-2

RL: PRP (Properties)

(elec. conductivity of)

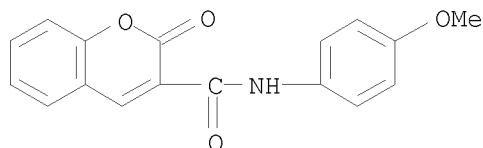
RN 1846-90-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



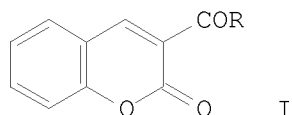
RN 1846-94-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)

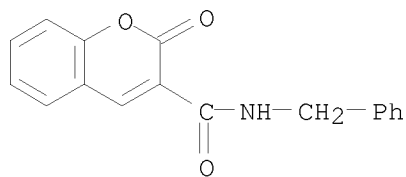


10/513699

L9 ANSWER 181 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1990:198091 CAPLUS  
DOCUMENT NUMBER: 112:198091  
ORIGINAL REFERENCE NO.: 112:33481a,33484a  
TITLE: Interaction of nitromethane with esters and amides of  
2-oxo-2H-1-benzopyran-3-carboxylic acid  
AUTHOR(S): Bodzhilova, A.; Kostadinova, T.; Ivanov, C.  
CORPORATE SOURCE: Dep. Chem., Univ. Sofia, Sofia, 1126, Bulg.  
SOURCE: Synthetic Communications (1989), 19(17),  
2963-75  
CODEN: SYNCAV; ISSN: 0039-7911  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 112:198091  
GI

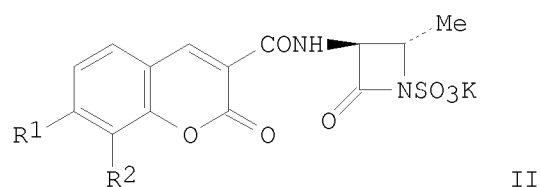
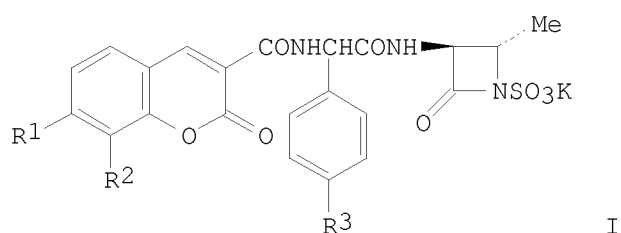


AB The addition of MeNO<sub>2</sub> with esters and amides of the title acids I (R = OMe, OEt, NMe<sub>2</sub>, MEt<sub>2</sub>, NHBz, morpholino) in the presence of KF and alcs. gives 2-HOC<sub>6</sub>H<sub>4</sub>CH(CH<sub>2</sub>NO<sub>2</sub>)CH(COR)CO<sub>2</sub>R<sub>1</sub> (R<sub>1</sub> = Me, Et). The configuration and conformation of II are discussed.  
IT 1846-90-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(ring opening and Michael addition reaction of, with nitromethane in alcs., ester-amides from)  
RN 1846-90-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



10/513699

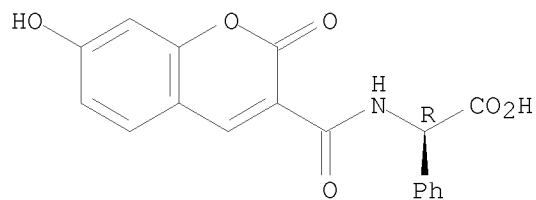
L9 ANSWER 182 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1990:138795 CAPLUS  
DOCUMENT NUMBER: 112:138795  
ORIGINAL REFERENCE NO.: 112:23455a,23458a  
TITLE: Synthesis of monobactam derivatives  
AUTHOR(S): Wang, Jian; Gao, Jinsheng; Hua, Weiyi  
CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop.  
Rep. China  
SOURCE: Zhongguo Yaoke Daxue Xuebao (1989), 20(4),  
193-8  
CODEN: ZHYXE9; ISSN: 1000-5048  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI



AB Monobactams I (R1 = H, OH, MeO; R2 = H, Br, Cl, OH, MeO; R3 = H, OH) and  
II (same R and R1) were prepared In the preliminary test of these compds.,  
different activities against Gram-pos. and Gram-neg. bacteria were observed  
IT 125817-02-9 125817-03-0 125817-04-1  
125817-05-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(amidation of)  
RN 125817-02-9 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

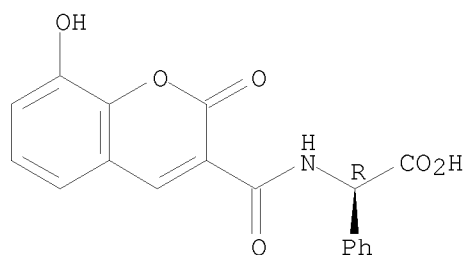
10/513699



RN 125817-03-0 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[ (8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

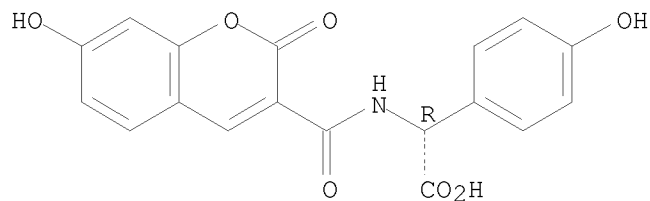
Absolute stereochemistry.



RN 125817-04-1 CAPLUS

CN Benzeneacetic acid, 4-hydroxy- $\alpha$ -[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

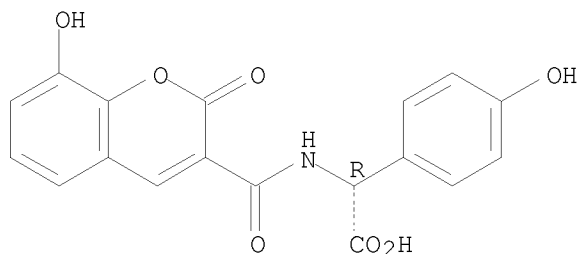


RN 125817-05-2 CAPLUS

CN Benzeneacetic acid, 4-hydroxy- $\alpha$ -[[ (8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



IT 125816-84-4P 125816-85-5P 125816-88-8P  
125816-89-9P 125816-91-3P 125816-94-6P  
125816-95-7P 125816-96-8P 125816-97-9P  
125817-00-7P 125817-01-8P 125875-07-2P  
125875-08-3P 125875-11-8P 125875-12-9P  
125875-13-0P 125875-14-1P 125875-17-4P  
125875-18-5P 125875-19-6P 125875-20-9P  
125875-23-2P 125875-24-3P

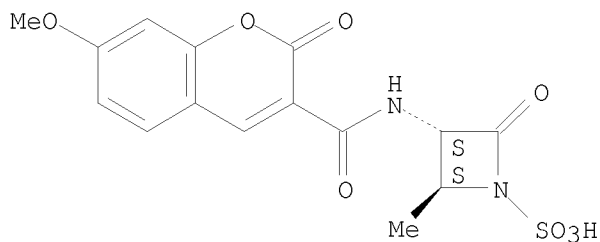
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and bactericidal activity of)

RN 125816-84-4 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-2-methyl-4-oxo-, monopotassium salt, (2S-trans)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



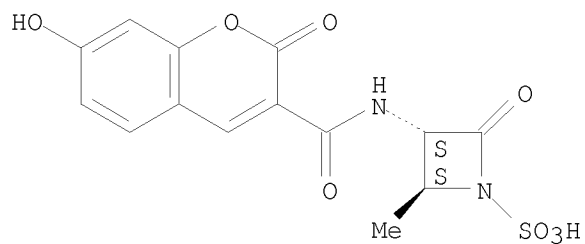
● K

RN 125816-85-5 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-2-methyl-4-oxo-, monopotassium salt, (2S-trans)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

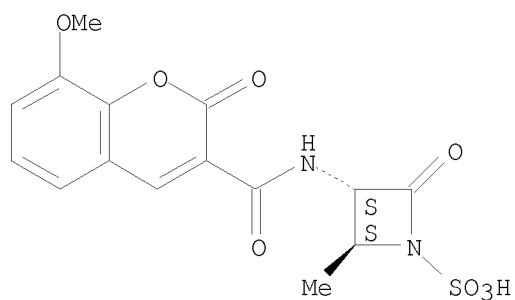
10/513699



● K

RN 125816-88-8 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[8-methoxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-2-methyl-4-oxo-, monopotassium salt, (2S-trans)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



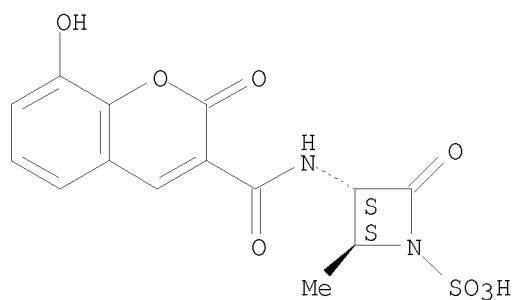
● K

RN 125816-89-9 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[8-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-2-methyl-4-oxo-, monopotassium salt, (2S-trans)- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



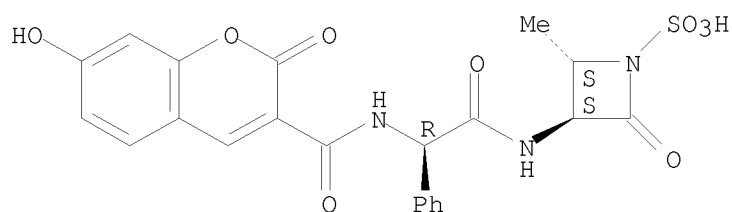
10/513699



● K

RN 125816-91-3 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

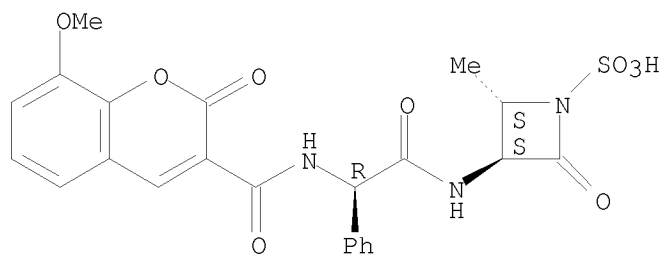


● K

RN 125816-94-6 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699

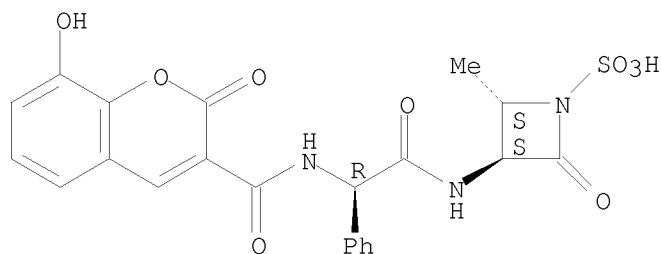


● K

RN 125816-95-7 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



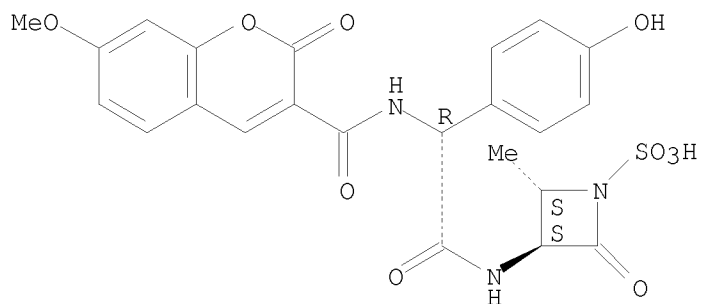
● K

RN 125816-96-8 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(4-hydroxyphenyl)[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

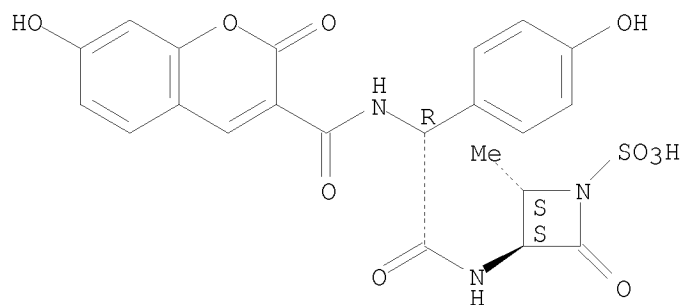
10/513699



RN 125816-97-9 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

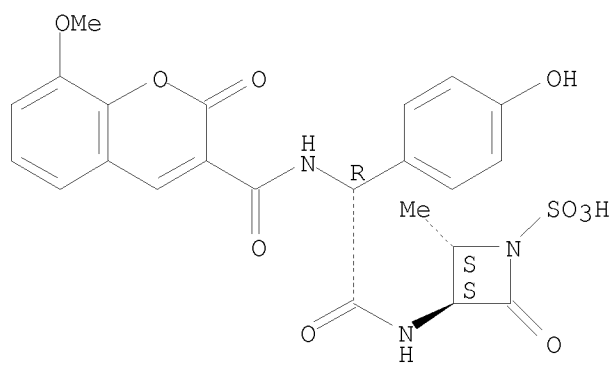


RN 125817-00-7 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(4-hydroxyphenyl)[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

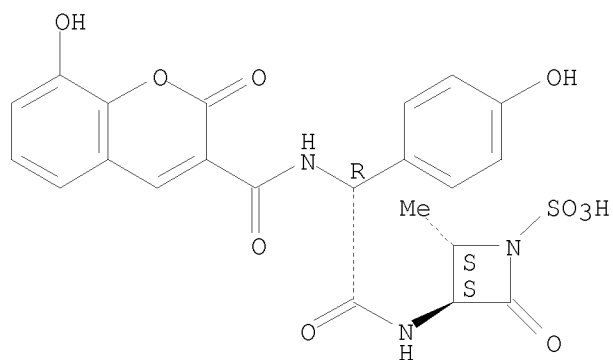
10/513699



● K

RN 125817-01-8 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2α,3β(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

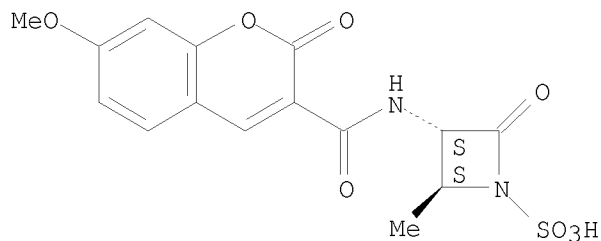


● K

RN 125875-07-2 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

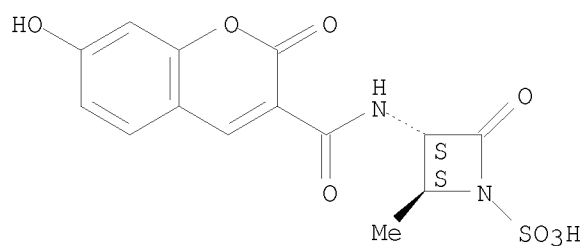
10/513699



RN 125875-08-3 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[7-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-2-methyl-4-oxo-, (2S-trans)- (9CI) (CA INDEX NAME)

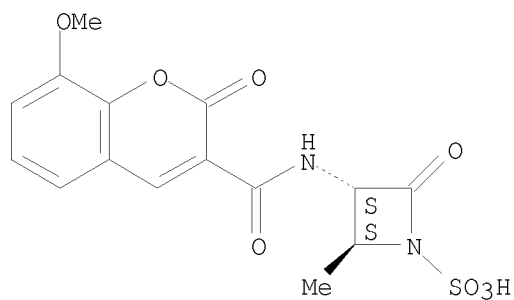
Absolute stereochemistry.



RN 125875-11-8 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[8-methoxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-2-methyl-4-oxo-, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

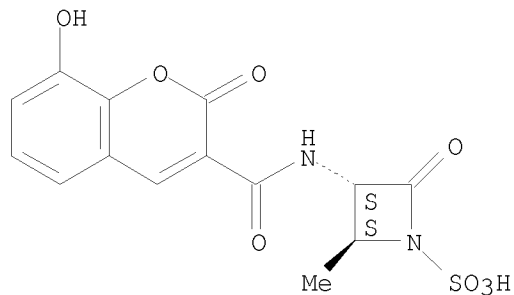


RN 125875-12-9 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[8-hydroxy-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-2-methyl-4-oxo-, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

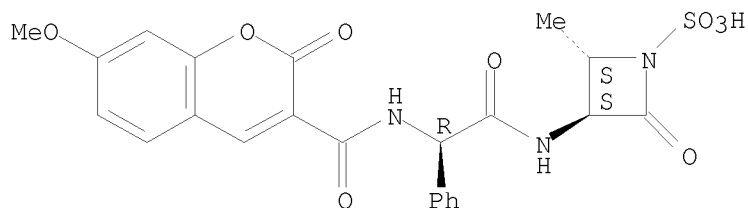
10/513699



RN 125875-13-0 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, [2S-[2α,3β(S\*)]]- (9CI) (CA INDEX NAME)

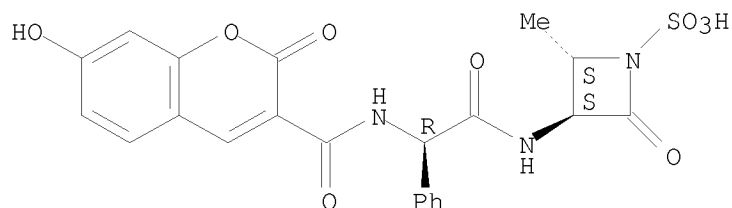
Absolute stereochemistry.



RN 125875-14-1 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, [2S-[2α,3β(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

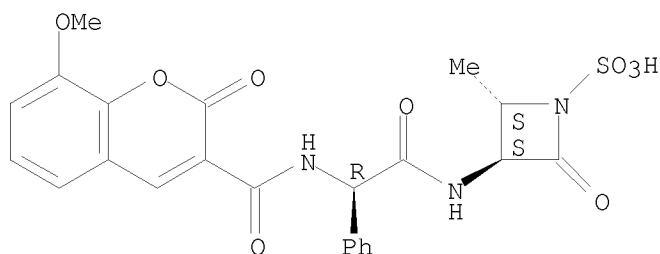


RN 125875-17-4 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, [2S-[2α,3β(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

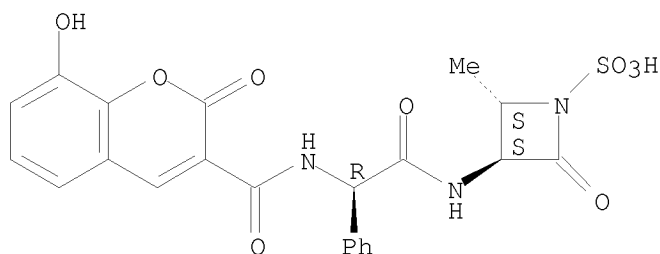
10/513699



RN 125875-18-5 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, [2S-[2 $\alpha$ , 3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

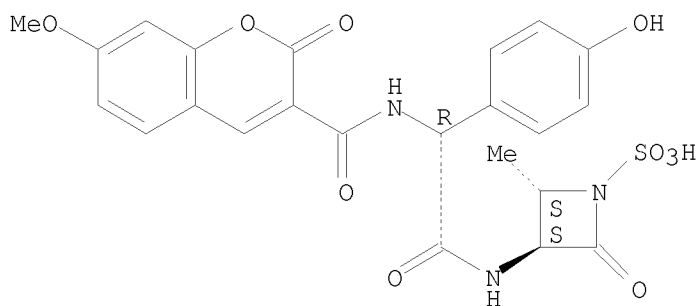
Absolute stereochemistry.



RN 125875-19-6 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(4-hydroxyphenyl)[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-2-methyl-4-oxo-, [2S-[2 $\alpha$ , 3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

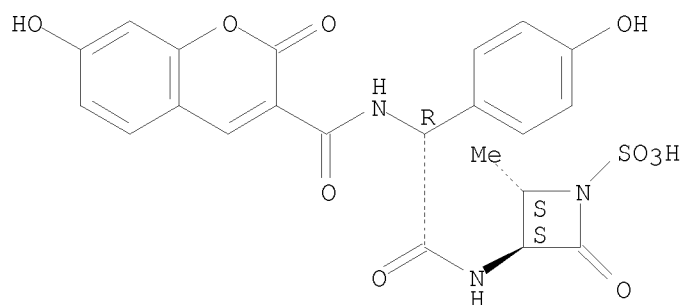


RN 125875-20-9 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-, [2S-[2 $\alpha$ , 3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

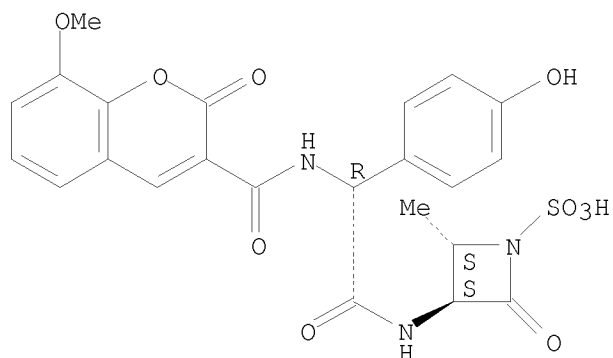
10/513699



RN 125875-23-2 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(4-hydroxyphenyl)[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-2-methyl-4-oxo-, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

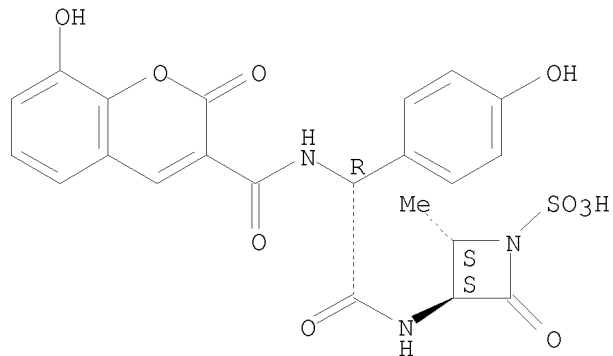
Absolute stereochemistry.



RN 125875-24-3 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





10/513699

<12/04/2007>

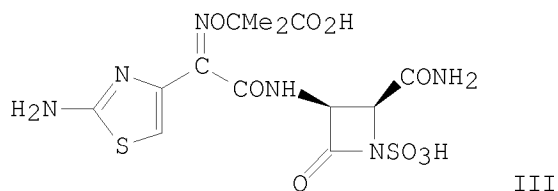
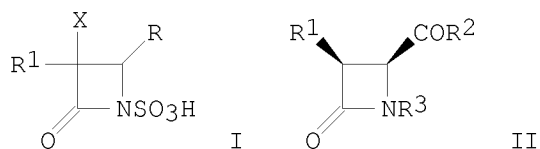
Erich Leese

10/513699

L9 ANSWER 183 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1990:118534 CAPLUS  
DOCUMENT NUMBER: 112:118534  
ORIGINAL REFERENCE NO.: 112:20067a,20070a  
TITLE: Preparation of 1-sulfo-2-oxoazetidines as  
antibacterial agents  
INVENTOR(S): Ochiai, Michihiko; Kishimoto, Shoji; Matsuo, Taisuke  
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
SOURCE: U.S., 252 pp. Cont.-in-part of U.S. Ser. No. 326,938.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 4782147	A	19881101	US 1983-499802	19830531 <--
WO 8201873	A1	19820610	WO 1980-JP297	19801205 <--
W: MC				
WO 8203859	A1	19821111	WO 1981-JP103	19810430 <--
W: MC				
WO 8300689	A1	19830303	WO 1981-JP183	19810821 <--
W: MC				
WO 8301063	A1	19830331	WO 1981-JP252	19810924 <--
W: MC				
US 4822788	A	19890418	US 1981-326938	19811203 <--
JP 58210061	A	19831207	JP 1982-93463	19820531 <--
JP 04066865	B	19921026		
US 4572801	A	19860225	US 1983-499801	19830531 <--
GB 2156350	A	19851009	GB 1985-9070	19850409 <--
GB 2156350	B	19860604		
NO 8700981	A	19831031	NO 1987-981	19870310 <--
FI 8801563	A	19880405	FI 1988-1563	19880405 <--
PRIORITY APPLN. INFO.:			WO 1980-JP297	A 19801205
			WO 1981-JP103	A 19810430
			WO 1981-JP183	A 19810821
			WO 1981-JP252	A 19810924
			US 1981-326938	A2 19811203
			JP 1982-93463	A 19820531
			WO 1981-WO103	A 19810430
			WO 1981-WO183	A 19810821
			WO 1981-WO252	A 19810924
			JP 1982-73728	A 19820430
			US 1982-405592	A2 19820805
			GB 1983-10520	A3 19830419
			FI 1983-1457	A 19830428
			NO 1983-1514	A1 19830429

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
OTHER SOURCE(S): MARPAT 112:118534  
GI



AB The title compds. [I; R = H, N3, halo, NH2, acylamino, OR5, SOnR5, P(O)(OR5)2, SSR5, C-attached organic residue; R1 = (protected) NH2, acylamino; R5 = organic residue; X = H, MeO; n = 0-2] and their salts were prepared 2-Oxoazetidine II [R1 = PhCH2O2CNH, R2 = OMe, R3 = 2,4-(MeO)2C6H3CH2] (preparation from corresponding 3-amino derivative given]

was

stirred 3 h at 90-95° with K2S2O8 in aqueous MeCN containing K2HPO4 to give II (R1 and R2 as above, R3 = H) which was stirred 19 h in THF containing aqueous NH3 to give II (R1 as above, R2 = NH2, R3 = H). The latter was hydrogenolyzed over Pd/C and the product stirred with 4-O2NC6H4CH2O2CCMe2ON:CQCOC1 [Q = 2-(2-chloroacetamido)-4-thiazolyl] (preparation given) to give II (R1 = 4-O2NC6H4CH2O2CCMe2ON:CQCONH, R2 = NH2, R3 = H) which was treated overnight at 4° with SO3.DMF in DMF to give, after ion-exchange chromatog., II (R1, R2 unchanged, R3 = SO3Na). Deprotection of the latter in 2 steps gave title compound III, which had min. inhibitory concentration of 1.56 and 0.39 µg/mL against Enterobacter cloacae IFO 129537 and Klebsiella pneumoniae TN 1711, resp.

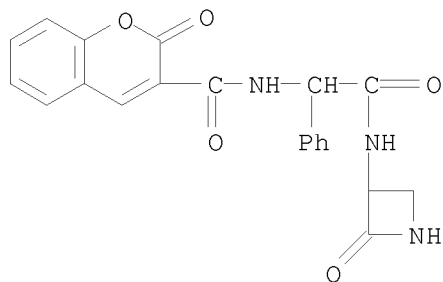
IT 78625-30-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antibacterial agents)

RN 78625-30-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[2-oxo-2-[(2-oxo-3-azetidiny]amino]-1-phenylethyl]- (CA INDEX NAME)



IT 78611-33-3P

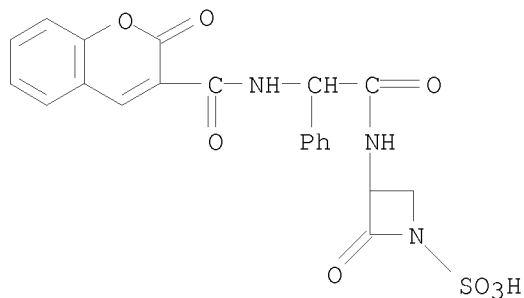
10/513699

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as antibacterial agent)

RN 78611-33-3 CAPLUS

CN 1-Azetidinesulfonic acid, 2-oxo-3-[[2-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-2-phenylacetyl]amino]-, sodium salt (1:1) (CA INDEX NAME)

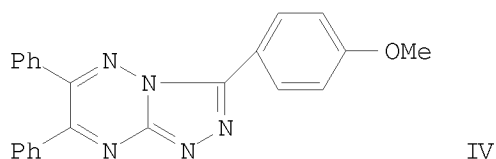
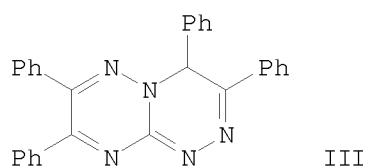
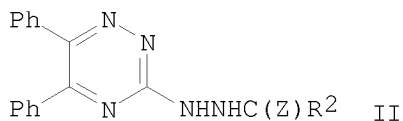
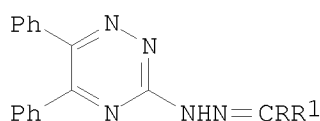


● Na

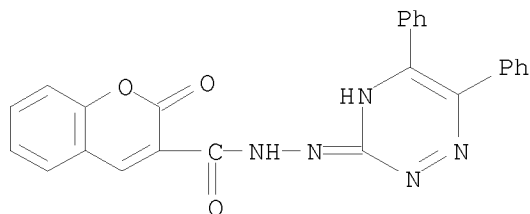
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 184 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1990:77122 CAPLUS  
 DOCUMENT NUMBER: 112:77122  
 ORIGINAL REFERENCE NO.: 112:13186h,13187a  
 TITLE: Synthesis of some more heterobicyclic derivatives  
 bearing a 1,2,4-triazine moiety and their  
 antibacterial activity  
 AUTHOR(S): Rahman, R. M. Abdel  
 CORPORATE SOURCE: Fac. Educ., Ain-Shams Univ., Cairo, Egypt  
 SOURCE: Pakistan Journal of Scientific and Industrial Research  
 (1989), 32(4), 240-5  
 CODEN: PSIRAA; ISSN: 0030-9885  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

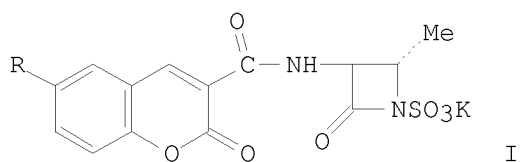


AB Triazine, I ( $R = \text{H, Ph, CH}_2\text{CN}$ ;  $R^1 = 4\text{-O}_2\text{NC}_6\text{H}_4, \text{NHNH}_2, \text{PhCHOH}$ , etc.) and II ( $R^2 = \text{MeCO, CH}_2\text{CO}_2\text{Et, 4-MeOC}_6\text{H}_4, 4\text{-O}_2\text{NC}_6\text{H}_4, 4\text{-HOC}_6\text{H}_4, \text{NPh}$ , etc.) were prepared from 3-hydrazino-5,6-diphenyl-1,2,4-triazine and carbonyl compds. Many hetrobicyclic derivs. e.g., triazinotriazine III and triazolotriazine IV were also prepared Antibacterial activity of some of these compds. were determined  
 IT 124983-47-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 124983-47-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(5,6-diphenyl-1,2,4-triazin-3-yl)hydrazide (CA INDEX NAME)

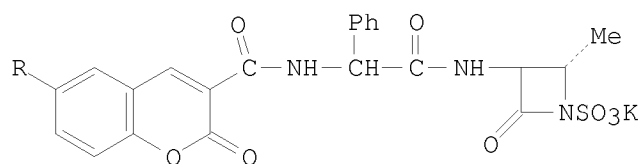


10/513699

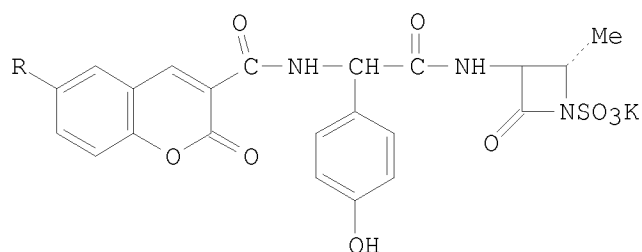
L9 ANSWER 185 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1989:594357 CAPLUS  
DOCUMENT NUMBER: 111:194357  
ORIGINAL REFERENCE NO.: 111:32295a,32298a  
TITLE: Synthesis of monobactam derivatives  
AUTHOR(S): Ji, Min; Hua, Weiyi; Wu, Xiaoming; Duan, Tinghan  
CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop.  
Rep. China  
SOURCE: Zhongguo Yaoke Daxue Xuebao (1988), 19(4),  
241-4  
CODEN: ZHYXE9; ISSN: 1000-5048  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI



I



II

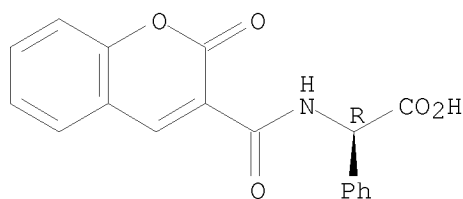


III

AB Monobactam coumarin derivs. I, II, and III (R = H, Br, Cl, NO<sub>2</sub>, OH, OMe)  
were prepared as potential bactericides.  
IT 81017-31-4P 123254-50-2P 123254-51-3P  
123254-52-4P 123254-53-5P 123254-54-6P  
123254-55-7P 123254-56-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with aminomethylazetidinonesulfonic acid)  
RN 81017-31-4 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

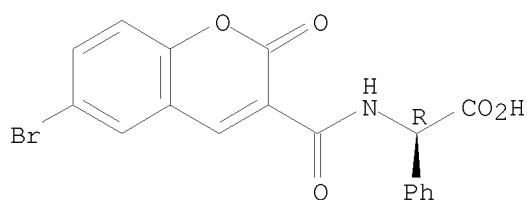
10/513699



RN 123254-50-2 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

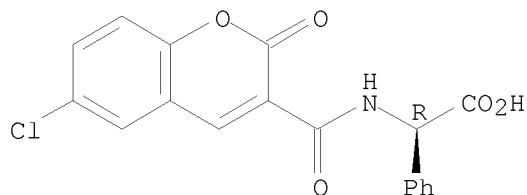
Absolute stereochemistry.



RN 123254-51-3 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[ (6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

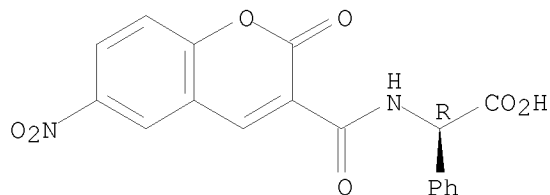
Absolute stereochemistry.



RN 123254-52-4 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[ (6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123254-53-5 CAPLUS

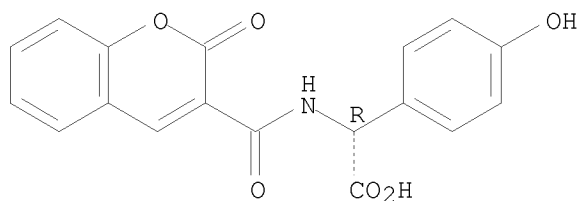
CN Benzeneacetic acid, 4-hydroxy- $\alpha$ -[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

<12/04/2007>

Erich Leese

10/513699

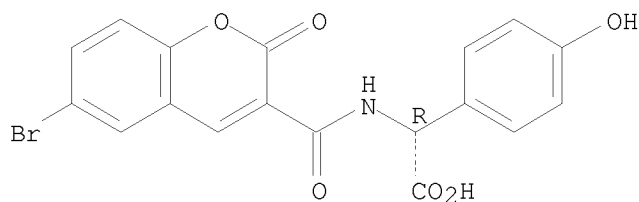
Absolute stereochemistry.



RN 123254-54-6 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-4-hydroxy-, (R)- (9CI) (CA INDEX NAME)

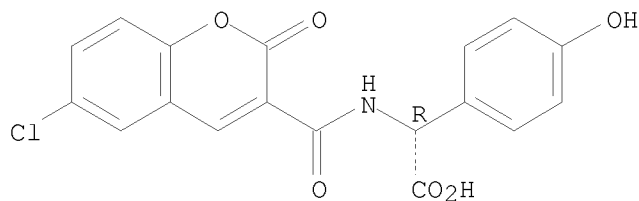
Absolute stereochemistry.



RN 123254-55-7 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-4-hydroxy-, (R)- (9CI) (CA INDEX NAME)

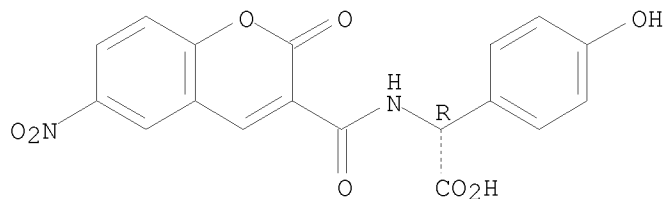
Absolute stereochemistry.



RN 123254-56-8 CAPLUS

CN Benzeneacetic acid, 4-hydroxy- $\alpha$ -[[[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

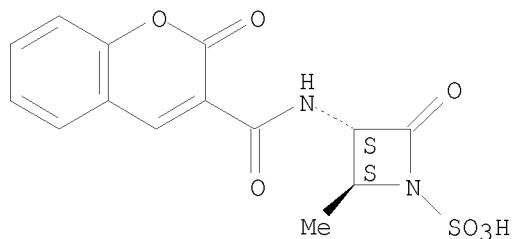




10/513699

IT 123254-34-2P 123254-35-3P 123254-36-4P  
123254-37-5P 123254-40-0P 123254-41-1P  
123254-42-2P 123254-44-4P 123254-45-5P  
123254-46-6P 123254-47-7P 123278-58-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 123254-34-2 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-methyl-4-oxo-3-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, monopotassium salt, (2S-trans)- (9CI) (CA INDEX NAME)

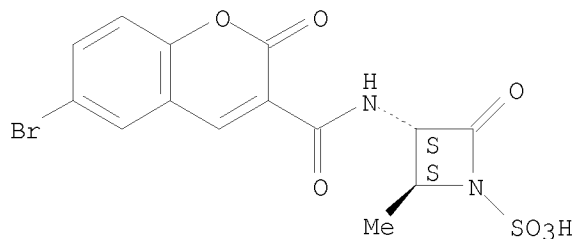
Absolute stereochemistry.



● K

RN 123254-35-3 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-2-methyl-4-oxo-, monopotassium salt, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

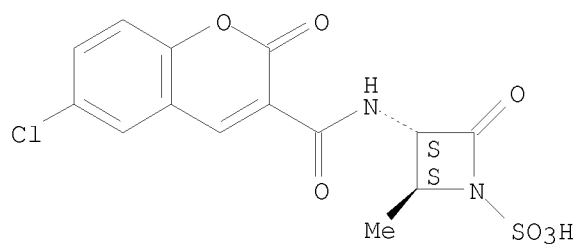


● K

RN 123254-36-4 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[ (6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-2-methyl-4-oxo-, monopotassium salt, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

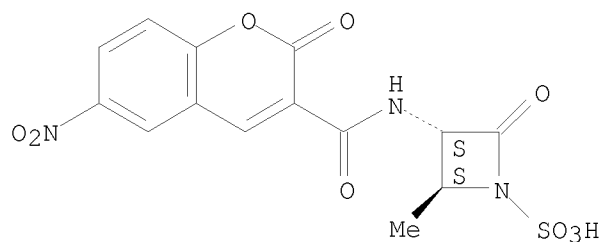
10/513699



● K

RN 123254-37-5 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-methyl-3-[[[6-nitro-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-4-oxo-, monopotassium salt, (2S-trans)- (9CI) (CA INDEX NAME)

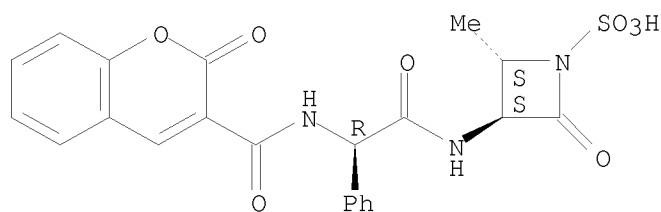
Absolute stereochemistry.



● K

RN 123254-40-0 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-methyl-4-oxo-3-[[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, monopotassium salt, [2S-[2 $\alpha$ , 3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● K

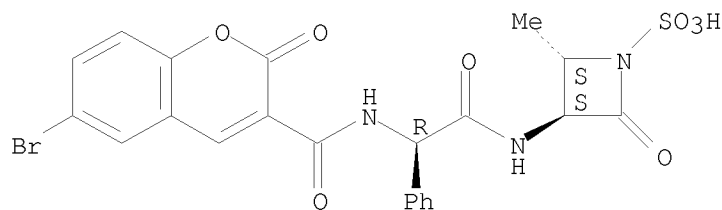
<12/04/2007>

Erich Leese

10/513699

RN 123254-41-1 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

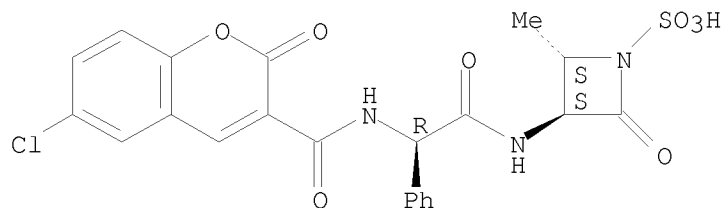
Absolute stereochemistry.



● K

RN 123254-42-2 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

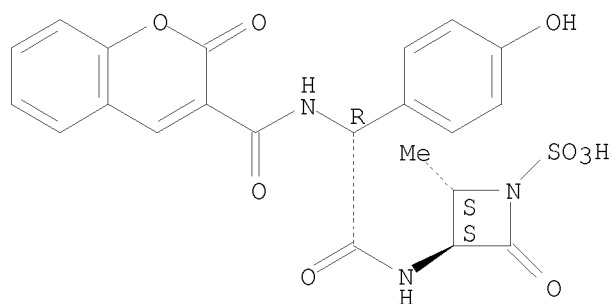


● K

RN 123254-44-4 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[(4-hydroxyphenyl)[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-2-methyl-4-oxo-, monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699

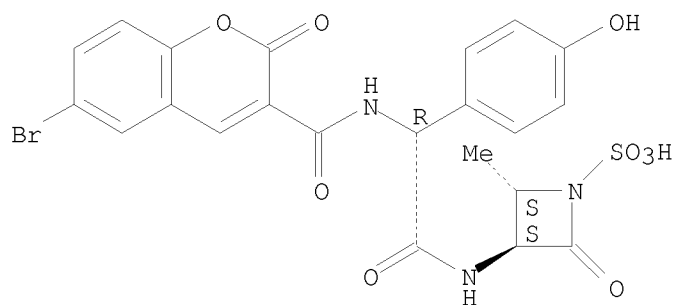


● K

RN 123254-45-5 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-,  
monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



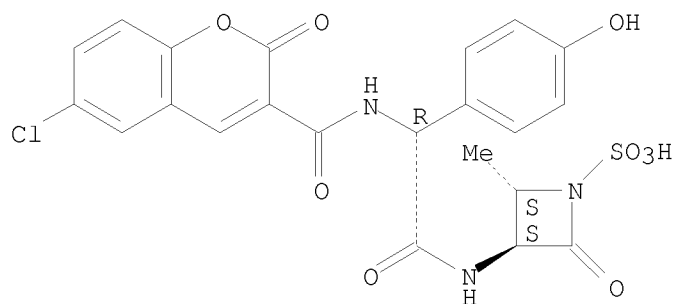
● K

RN 123254-46-6 CAPLUS

CN 1-Azetidinesulfonic acid, 3-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-2-methyl-4-oxo-,  
monopotassium salt, [2S-[2 $\alpha$ ,3 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

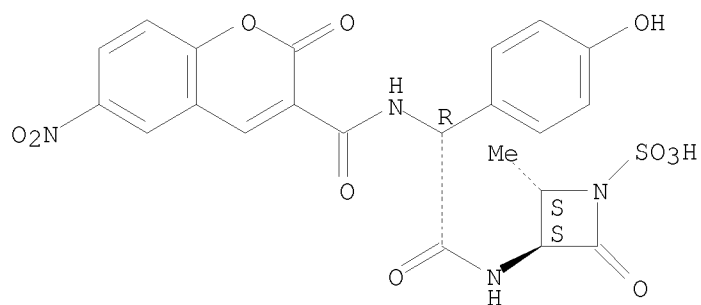
Absolute stereochemistry.

10/513699



RN 123254-47-7 CAPLUS  
CN 1-Azetidinesulfonic acid, 3-[[[4-hydroxyphenyl][(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-2-methyl-4-oxo-,  
monopotassium salt, [2S-[2α,3β(S\*)]]- (9CI) (CA INDEX NAME)

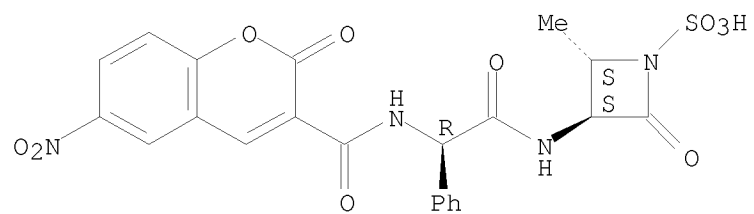
Absolute stereochemistry.



RN 123278-58-0 CAPLUS  
CN 1-Azetidinesulfonic acid, 2-methyl-3-[[[[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-4-oxo-, monopotassium salt,  
[2S-[2α,3β(S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



● K

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 186 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:574009 CAPLUS

DOCUMENT NUMBER: 111:174009

ORIGINAL REFERENCE NO.: 111:28990h,28991a

TITLE: Preparation and formulation of dihydrodibenzoxepins and analogs as thromboxane A2 antagonists

INVENTOR(S): Oshima, Etsuo; Obase, Hiroyuki; Karasawa, Akira; Kubo, Kazuhiro; Miki, Ichiro; Ishii, Akio

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 107 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 312051	A2	19890419	EP 1988-117024	19881013 <--
EP 312051	A3	19900704		
EP 312051	B1	19940817		
R: DE, FR, GB, IT				
JP 02000250	A	19900105	JP 1988-224052	19880907 <--
US 4882351	A	19891121	US 1988-255485	19881011 <--
US 5010104	A	19910423	US 1989-372771	19890629 <--
US 5010087	A	19910423	US 1989-381330	19890718 <--
PRIORITY APPLN. INFO.:			JP 1987-259145	A 19871014
			US 1988-255485	A3 19881011

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 111:174009; MARPAT 111:174009

GI For diagram(s), see printed CA Issue.

AB The title compds. I [X1X2 = CH2O, CH2SO1, CH2CH2, etc.; l = 0-2; L = CH:CH, S; dotted line represents either single or double bond; W = S, O, NH, CH2, NHCO, etc.; n = 0-3; Z = NR1CO, NR1SO2, NR1CONH, etc.; R1 = H, lower alkyl; Q = C1-18 alkyl, C3-6 alicyclic alkyl, C2-6 alkenyl, etc.; one of RA and RB is H, the other is YM; Y = single bond, CR3R4(CH2)m, etc.; R3, R4 = H, lower alkyl; m = 0-4; M = CO2R5, tetrazolyl, etc.; R5 = H, lower alkyl; GA, GB = lower alkyl, halo, etc.; gA, gB = 0-3], were prepared Reaction of Me 11-(2-aminoethyl)thio-6,11-dihydrodibenz[b,e]oxepin-2-carboxylate with PhSO2Cl, followed by saponification, gave 11-[2-[(phenylsulfonyl)amino]ethyl]thio-6,11-dihydrodibenz[b,e]oxepin-2-carboxylic acid (II). II in vitro exhibited a min. effective concentration of 0.3 µg/mL against platelet aggregation induced by 9,11-dideoxy-9α,11-dideoxy-9α,11α-methanoepoxyprostaglandin F2α. Tablets containing II 200, lactose 60, starch 30, polyvinyl alc. 2, Mg stearate 1 mg and tar pigment (trace) were prepared

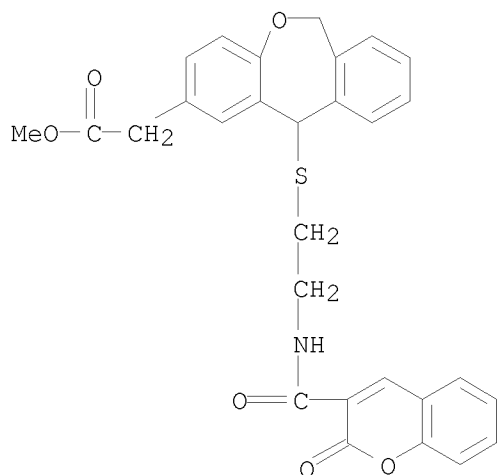
IT 123227-20-3P 123227-29-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as thromboxane A2 antagonist)

RN 123227-20-3 CAPLUS

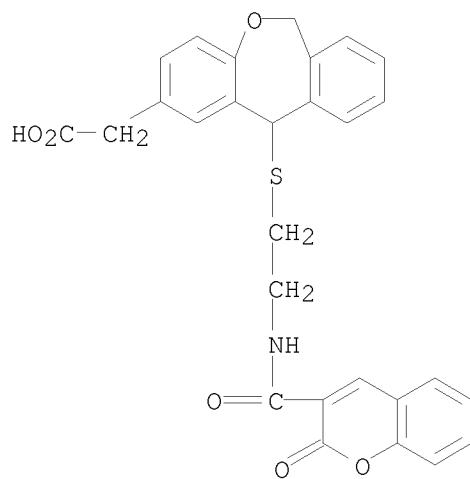
CN Dibenz[b,e]oxepin-2-acetic acid, 6,11-dihydro-11-[[2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]ethyl]thio]-, methyl ester (CA INDEX NAME)

10/513699



RN 123227-29-2 CAPLUS

CN Dibenz[b,e]oxepin-2-acetic acid, 6,11-dihydro-11-[[2-[[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]thio]- (CA INDEX NAME)

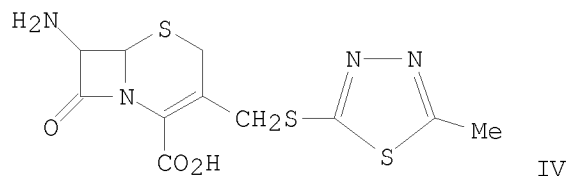
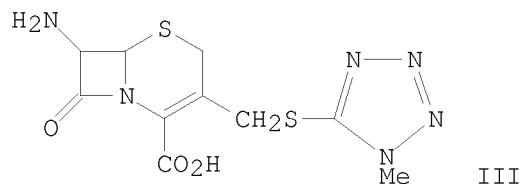
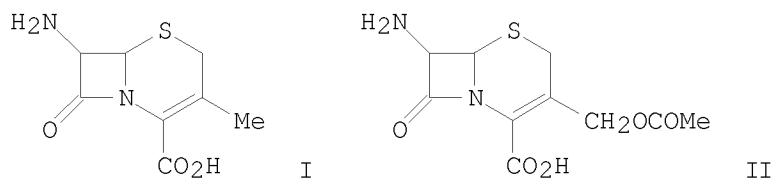


OS.CITING REF COUNT: 10

THERE ARE 10 CAPLUS RECORDS THAT CITE THIS  
RECORD (16 CITINGS)



L9 ANSWER 187 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1989:573828 CAPLUS  
 DOCUMENT NUMBER: 111:173828  
 ORIGINAL REFERENCE NO.: 111:28950h,28951a  
 TITLE: Synthesis of (6,8-disubstituted  
 coumarin-3-formamido)cephalosporins  
 AUTHOR(S): Tang, Jian; Duan, Tinghan; Li, Minghua  
 CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop.  
 Rep. China  
 SOURCE: Zhongguo Yaoke Daxue Xuebao (1988), 19(4),  
 253-7  
 CODEN: ZHYXE9; ISSN: 1000-5048  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI



AB A series of 15 cephalosporin derivs. was designed and prepared by direct condensation of 6,8-disubstituted coumarin-3-carboxylic acids and the 7-amino group of I, II, III, and IV. Isolation and purification were conducted with Sephadex LH-20 column chromatog. and the centrifugal-TLC technique. Most of these novel derivs. exhibited bacteriostasis to gram-pos. bacteria and to some gram-neg. bacteria.

IT 123254-21-7P 123254-22-8P 123254-25-1P  
 123254-26-2P 123254-27-3P 123254-28-4P  
 123254-29-5P 123254-30-8P 123254-31-9P  
 123254-32-0P 123278-56-8P

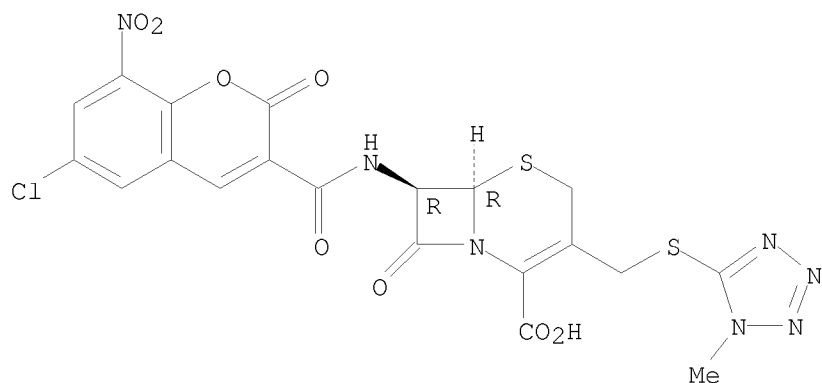
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as bacteriostat)

RN 123254-21-7 CAPLUS

10/513699

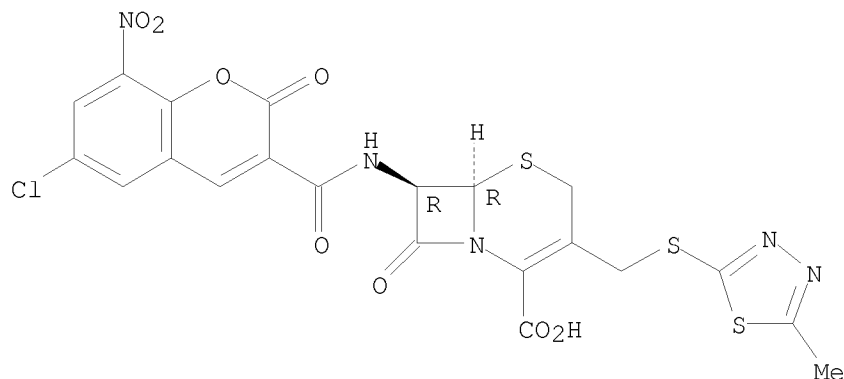
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-chloro-8-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (1-  
methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
NAME)

Absolute stereochemistry.



RN 123254-22-8 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-chloro-8-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (5-  
methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA  
INDEX NAME)

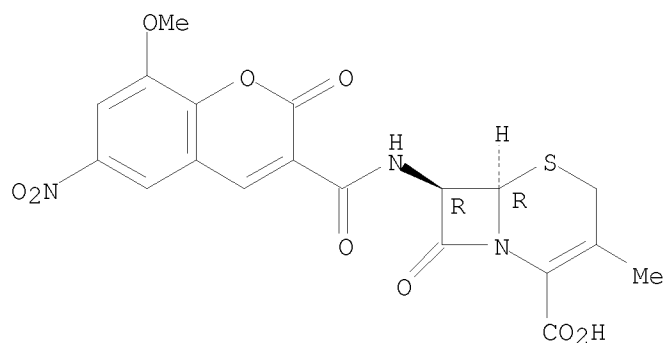
Absolute stereochemistry.



RN 123254-25-1 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (8-methoxy-6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-  
8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

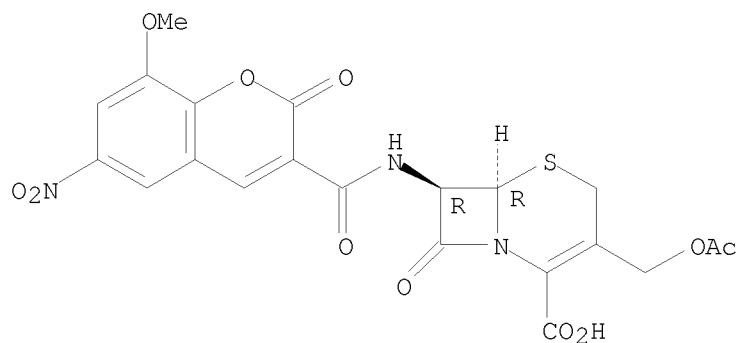
Absolute stereochemistry.

10/513699



RN 123254-26-2 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (8-methoxy-6-nitro-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

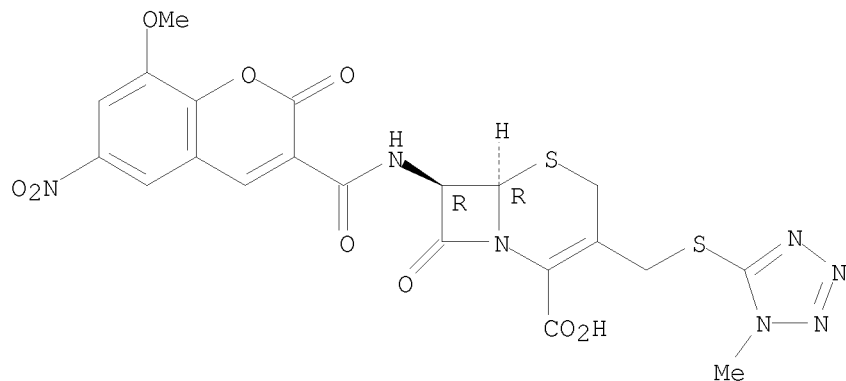
Absolute stereochemistry.



RN 123254-27-3 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (8-methoxy-6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (1-  
methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX  
NAME)

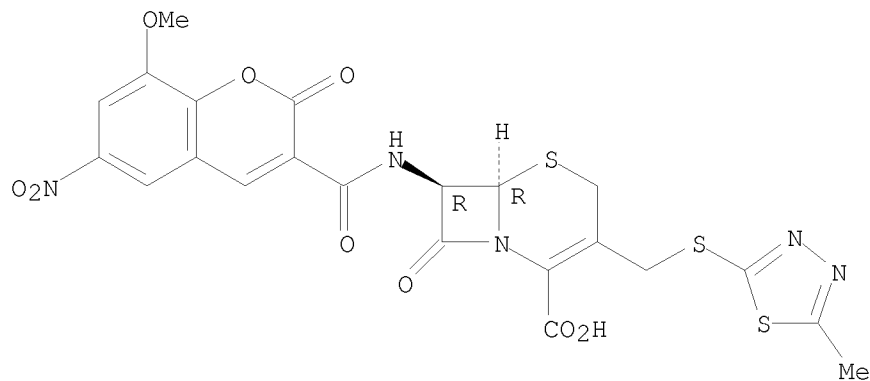
Absolute stereochemistry.

10/513699



RN 123254-28-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (8-methoxy-6-nitro-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-3-[[ (5-  
methyl-1,3,4-thiadiazol-2-yl) thio] methyl]-8-oxo-, (6R-trans)- (9CI) (CA  
INDEX NAME)

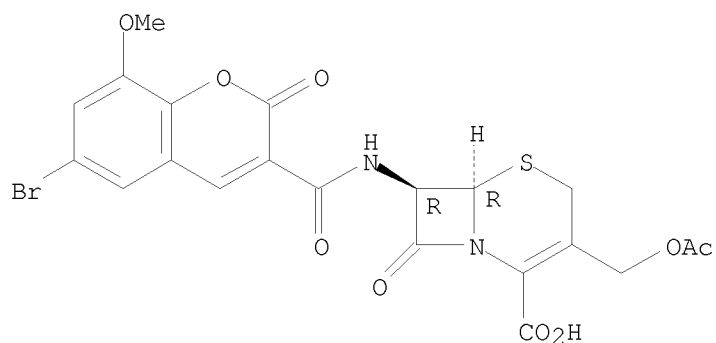
Absolute stereochemistry.



RN 123254-29-5 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy) methyl]-7-[[ (6-bromo-8-methoxy-2-oxo-2H-1-benzopyran-3-  
yl) carbonyl] amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

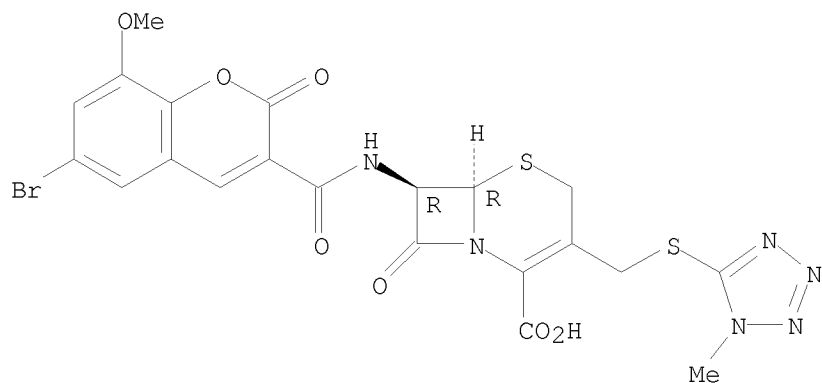
Absolute stereochemistry.

10/513699



RN 123254-30-8 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-bromo-8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

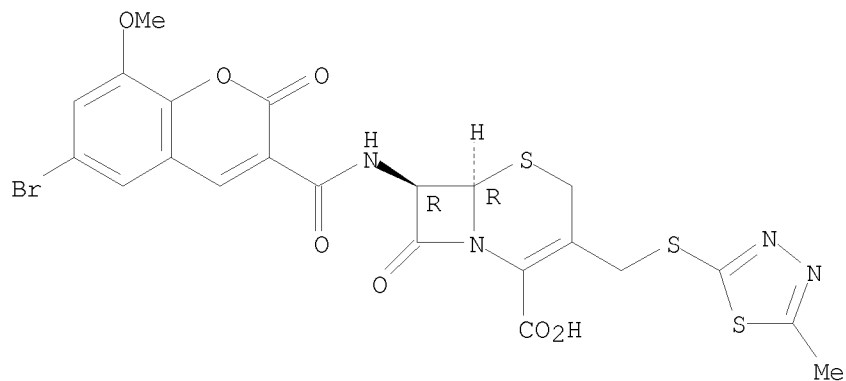
Absolute stereochemistry.



RN 123254-31-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-bromo-8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

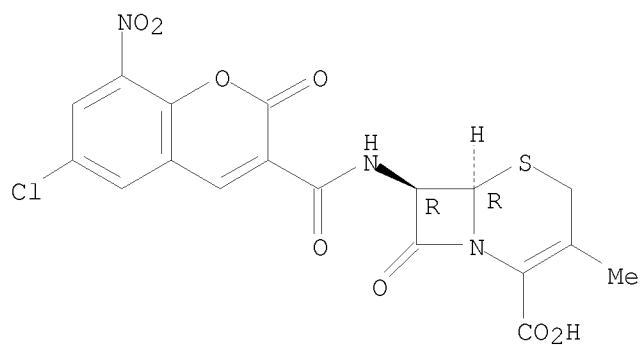
10/513699



RN 123254-32-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-chloro-8-nitro-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-3-methyl-  
8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

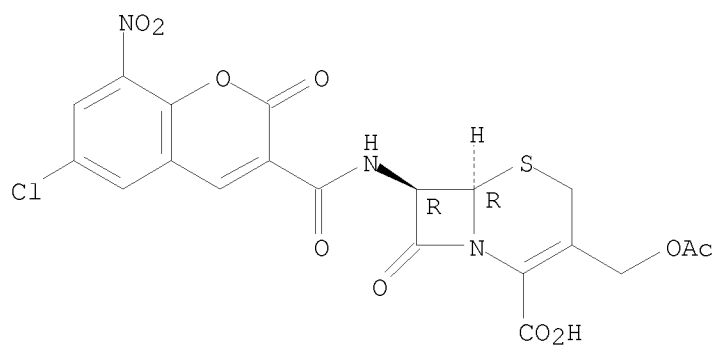
Absolute stereochemistry.



RN 123278-56-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-chloro-8-nitro-2-oxo-2H-1-benzopyran-3-  
yl) carbonyl] amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



<12/04/2007>

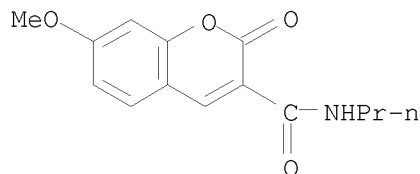
Erich Leese

10/513699

<12/04/2007>

Erich Leese

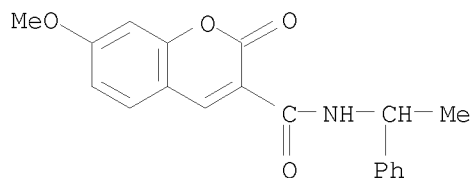
L9 ANSWER 188 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1989:526163 CAPLUS  
 DOCUMENT NUMBER: 111:126163  
 ORIGINAL REFERENCE NO.: 111:20927a,20930a  
 TITLE: 3-(7-Methoxycoumarin-3-carbonyl)- and  
 3-(7-dimethylaminocoumarin-3-carbonyl)-2-oxazolones as  
 new fluorescent labeling reagents for high-performance  
 liquid chromatography  
 AUTHOR(S): Takadate, Akira; Yagashiro, Ichiro; Irikura, Mitsuru;  
 Fujino, Hiroyuki; Goya, Shujiro  
 CORPORATE SOURCE: Daiichi Coll. Pharm. Sci., Fukuoka, 815, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1989),  
 37(2), 373-6  
 CODEN: CPBTAL; ISSN: 0009-2363  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 111:126163  
 AB 3-(7-Methoxycoumarin-3-carbonyl)- and  
 3-(7-dimethylaminocoumarin-3-carbonyl)-2-oxazolones (IIa and IIb) were  
 synthesized as fluorescent labeling reagents for high-performance liquid  
 chromatog. (HPLC). Treatment of 7-methoxy- and  
 7-dimethylaminocoumarin-3-carboxylic acids (Ia and Ib) with di-Ph  
 2-oxo-3-oxazolinyolphosphonate in the presence of triethylamine in  
 dichloromethane gave IIa and IIb in 45% and 26% yields, resp. Compds. IIa  
 and IIb reacted with primary and secondary amines at room temperature in  
 chloroform to give the corresponding fluorescent 7-methoxy- and  
 7-dimethylamino-3-carboxamides (IIIa-i and IVa-i). A mixture of primary  
 amines was labeled with IIa and chromatographed on a reversed-phase HPLC  
 column (mobile phase: methanol-water) with a fluorescence detector. The  
 detection limit of a test compound, benzylamine, was 19 fmol/100  $\mu$ L by  
 the use of IIa.  
 IT 122607-18-5P 122607-19-6P 122607-20-9P  
 122607-21-0P 122607-22-1P 122607-23-2P  
 RL: ANST (Analytical study); PREP (Preparation)  
 (preparation and spectra and phys. properties and HPLC of)  
 RN 122607-18-5 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-propyl- (CA INDEX NAME)



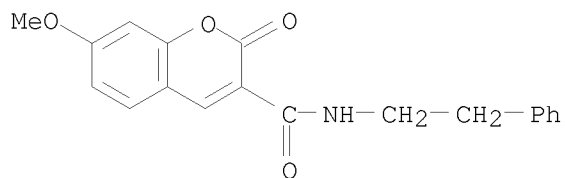
RN 122607-19-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-(1-phenylethyl)- (CA  
 INDEX NAME)



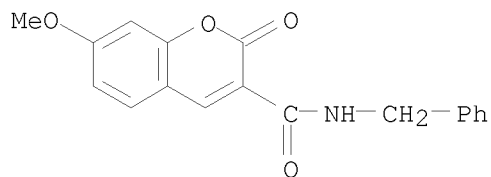
10/513699



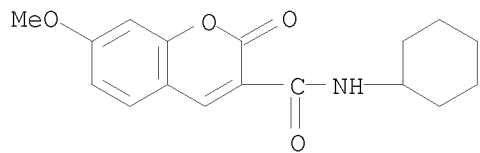
RN 122607-20-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-(2-phenylethyl)- (CA  
INDEX NAME)



RN 122607-21-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-(phenylmethyl)- (CA  
INDEX NAME)

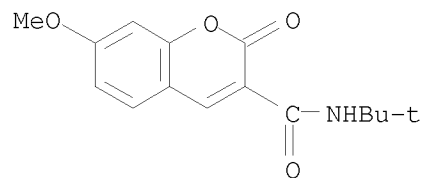


RN 122607-22-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-cyclohexyl-7-methoxy-2-oxo- (CA INDEX  
NAME)



RN 122607-23-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(1,1-dimethylethyl)-7-methoxy-2-oxo- (CA  
INDEX NAME)

10/513699



OS.CITING REF COUNT: 8

THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD  
(8 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 189 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1989:514965 CAPLUS  
 DOCUMENT NUMBER: 111:114965  
 ORIGINAL REFERENCE NO.: 111:19271a,19274a  
 TITLE: Preparation of (carboxamidomethyl)cephemcarboxylic  
 acids as antibiotics  
 INVENTOR(S): Arnould, Jean Claude; Jung, Frederick Henri;  
 Boucherot, Dominique; Strawson, Colin John; Davies,  
 David Huw  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK; ICI-Pharma S. A.  
 SOURCE: Eur. Pat. Appl., 78 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 304158	A1	19890222	EP 1988-306420	19880713 <--
EP 304158	B1	19940622		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
HU 47942	A2	19890428	HU 1988-3692	19880715 <--
HU 201949	B	19910128		
FI 8803439	A	19890124	FI 1988-3439	19880720 <--
ZA 8805271	A	19890329	ZA 1988-5271	19880720 <--
DK 8804148	A	19890124	DK 1988-4148	19880722 <--
NO 8803275	A	19890124	NO 1988-3275	19880722 <--
AU 8819762	A	19890127	AU 1988-19762	19880722 <--
JP 01093592	A	19890412	JP 1988-182006	19880722 <--
CN 1031378	A	19890301	CN 1988-106393	19880723 <--
US 5019570	A	19910528	US 1988-223988	19880725 <--
US 5232918	A	19930803	US 1991-653149	19910211 <--
US 5371220	A	19941206	US 1992-886392	19920521 <--
PRIORITY APPLN. INFO.:			EP 1987-401718	A 19870723
			US 1988-223988	A3 19880725
			US 1991-653149	A3 19910211

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 111:114965

GI For diagram(s), see printed CA Issue.

AB Cephalosporins having Q as a 3-position substituent [R1 = H, (substituted) C1-6 alkyl, etc.; Het = 5- or 6-membered heterocyclic ring Q1, Q2; A = CH, N; B = O, S, etc.; 1 or 2 of D, E, F, and G = N, the remainder = CH; or Het = pyrazinone, pyridinone, etc.; Het is fused by any 2 adjacent C atoms to the benzene ring and is bonded via a C atom to the CH2NR1CO group; R2, R3 = OH, in vivo hydrolyzable ester thereof; R3 is ortho to R2] were prepared as antibiotics. Reaction of 6,7-bis(phenylacetoxy)-1,4-dihydro-1-ethyl-4-oxoquinoline-3-carbonyl chloride with 3-(aminomethyl)-7-[2-(2-amino-4-thiazolyl)-2-[(Z)-[(1-carboxy-1-methylethoxy)imino]]acetamido]ceph-3-em-4-carboxylic acid in DMF containing Et3N, followed by deprotection and workup, gave 7-[2-(2-amino-4-thiazolyl)-2-[(Z)-[(1-carboxy-1-methylethoxy)imino]]acetamido]-3-[(1,4-dihydro-1-ethyl-6,7-dihydroxy-4-oxoquinolin-3-carboxamido)methyl]ceph-3-em-4-carboxylic acid (I). I had min. inhibitory concns. of 0.008 µg/mL and 16 µg/mL, resp., against Escherichia coli DCO and Staphylococcus aureus 147 N.

IT 122235-03-4P

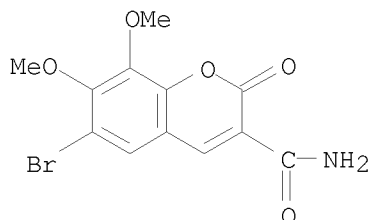
10/513699

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation and reaction of, in preparation of antibiotic)

RN 122235-03-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-7,8-dimethoxy-2-oxo- (CA INDEX  
NAME)



IT 122234-32-6P 122234-33-7P 122234-34-8P

122234-35-9P 122234-36-0P 122234-37-1P

122256-32-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
study); PREP (Preparation)

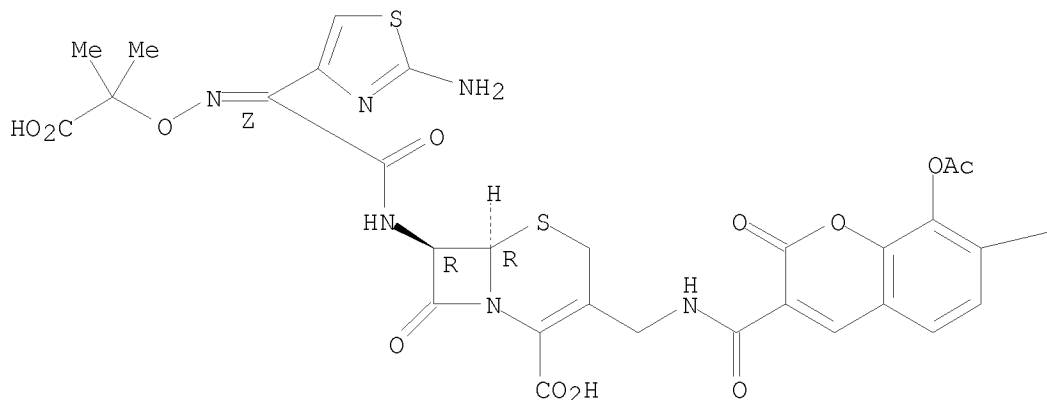
(preparation of, as antibiotic)

RN 122234-32-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(2-amino-4-thiazolyl)[(1-carboxy-1-methylethoxy)imino]acetyl]amino]-3-  
[[[7,8-bis(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]methyl]-8-  
oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

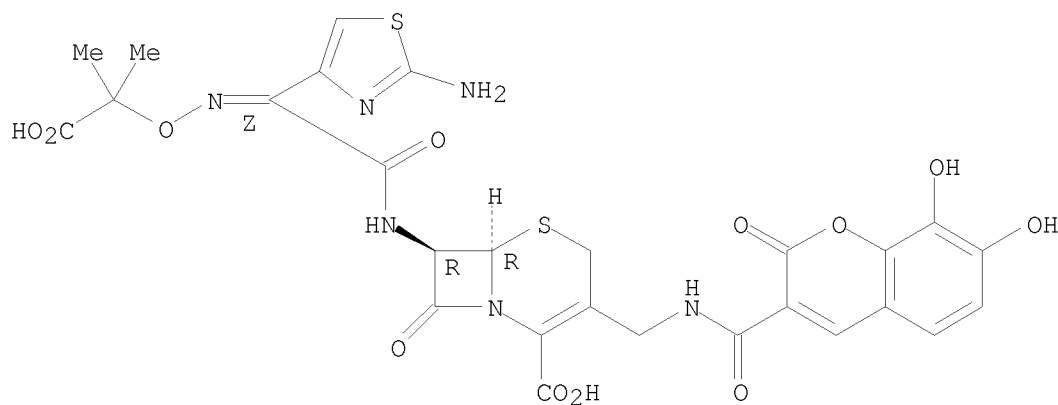
PAGE 1-A



—OAc

RN 122234-33-7 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[ (2-amino-4-thiazolyl) [(1-carboxy-1-methylethoxy) imino] acetyl] amino]-3-  
 [[[ (7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino] methyl]-8-oxo-  
 , [6R-[6 $\alpha$ ,7 $\beta$ (Z)]]- (9CI) (CA INDEX NAME)

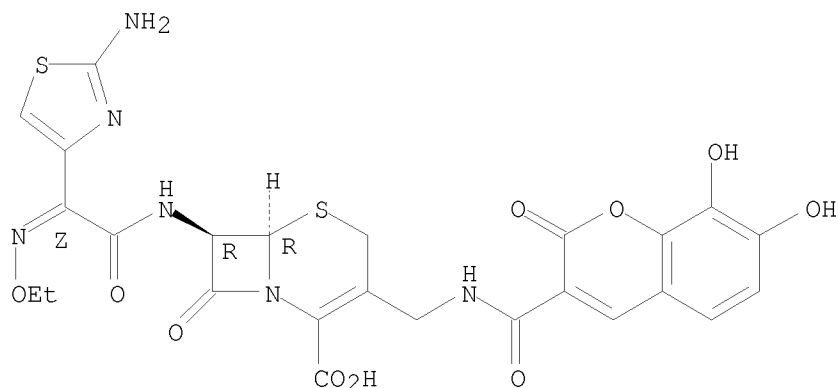
Absolute stereochemistry.  
 Double bond geometry as shown.



RN 122234-34-8 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[ (2-amino-4-thiazolyl) (ethoxyimino) acetyl] amino]-3-[[[ (7,8-dihydroxy-2-  
 oxo-2H-1-benzopyran-3-yl) carbonyl] amino] methyl]-8-oxo-  
 , [6R-[6 $\alpha$ ,7 $\beta$ (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

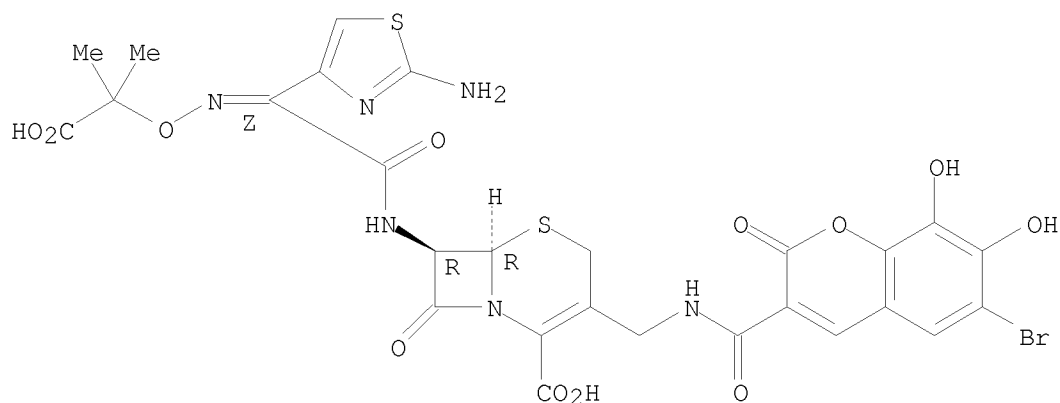
10/513699



RN 122234-35-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (2-amino-4-thiazolyl) [(1-carboxy-1-methylethoxy) imino] acetyl] amino]-3-  
[[[(6-bromo-7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino] methyl]-8-oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (Z)]]- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

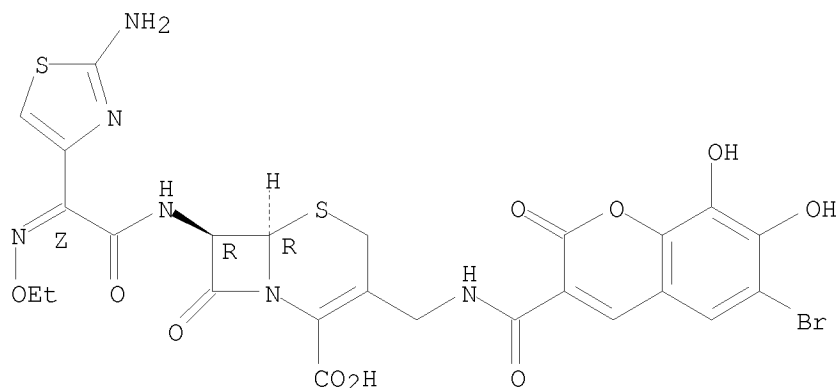


RN 122234-36-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (2-amino-4-thiazolyl) (ethoxyimino) acetyl] amino]-3-[[[(6-bromo-7,8-  
dihydroxy-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino] methyl]-8-oxo-,  
[6R-[6 $\alpha$ ,7 $\beta$ (Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

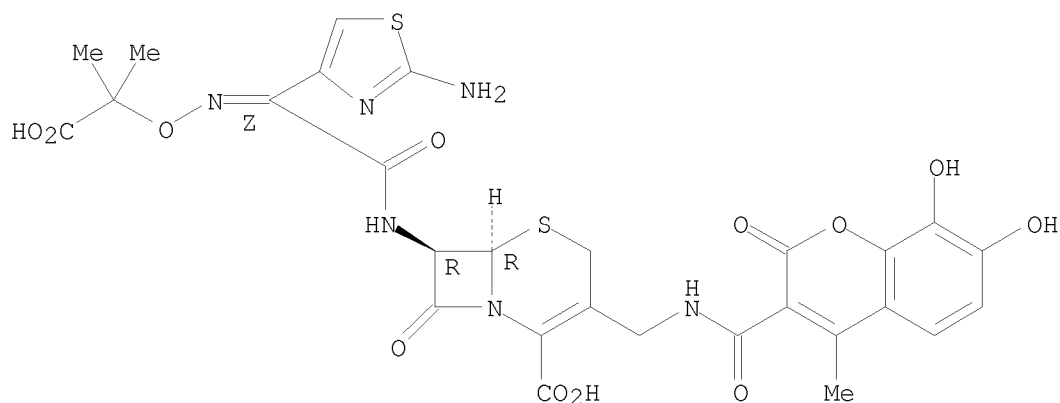
10/513699



RN 122234-37-1 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (2-amino-4-thiazolyl) [ (1-carboxy-1-methylethoxy) imino] acetyl] amino]-3-  
[[[ (7,8-dihydroxy-4-methyl-2-oxo-2H-1-benzopyran-3-  
yl) carbonyl] amino] methyl]-8-oxo-, [6R-[6α,7β(Z)]]- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

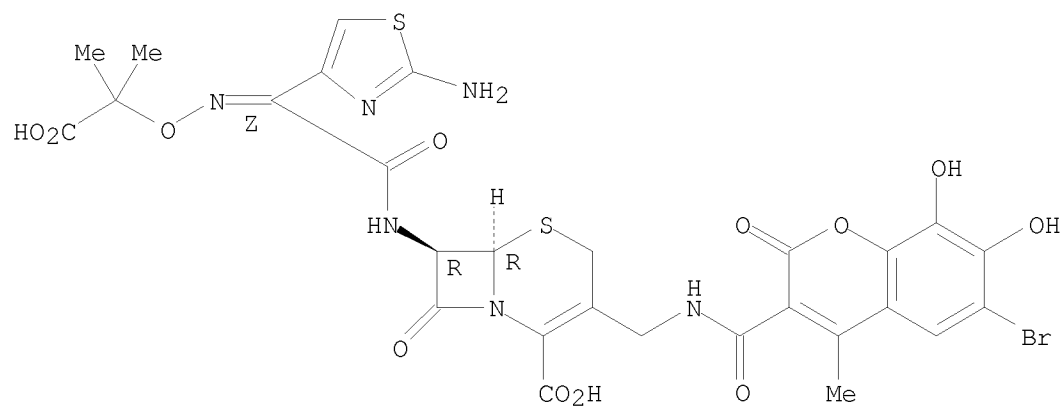


RN 122256-32-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (2-amino-4-thiazolyl) [ (1-carboxy-1-methylethoxy) imino] acetyl] amino]-3-  
[[[ (6-bromo-7,8-dihydroxy-4-methyl-2-oxo-2H-1-benzopyran-3-  
yl) carbonyl] amino] methyl]-8-oxo-, [6R-[6α,7β(Z)]]- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

10/513699



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

<12/04/2007>

Erich Leese



L9 ANSWER 190 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:419377 CAPLUS

DOCUMENT NUMBER: 111:19377

ORIGINAL REFERENCE NO.: 111:3327a,3330a

TITLE: Syntheses of some 1-(substituted coumarin-3-carboxamido)-3-substituted-4-aryl-2-azetidinones as potential antifungal agents

AUTHOR(S): Giri, S.; Sharan, P.; Nizamuddin

CORPORATE SOURCE: Chem. Dep., Univ. Gorakhpur, Gorakhpur, 273009, India

SOURCE: Agricultural and Biological Chemistry (1989), 53(4), 1153-5

CODEN: ABCHA6; ISSN: 0002-1369

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 111:19377

AB A series of 10 coumarin derivs. were synthesized and tested in vitro against *Aspergillus niger* and *A. oryzae*. All the compds. in this investigation had moderate to strong fungitoxicity. However, the presence of a chlorine atom at position-3 in the 2-azetidinone system imparted much towards this fungitoxicity. Replacement of the H-atom of 2-azetidinone at position-3 by a phthalimido structure markedly increased the fungitoxicity.

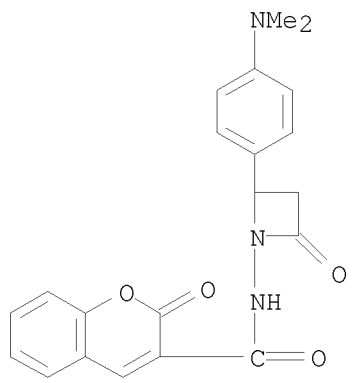
IT 121188-05-4P 121188-06-5P 121188-09-8P  
 121188-10-1P 121188-11-2P 121188-12-3P  
 121206-87-9P 121206-88-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antifungal activity of, structure in relation to)

RN 121188-05-4 CAPLUS

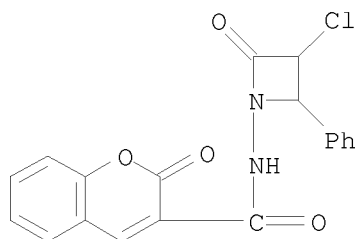
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-(dimethylamino)phenyl]-4-oxo-1-azetidinyl]-2-oxo- (CA INDEX NAME)



RN 121188-06-5 CAPLUS

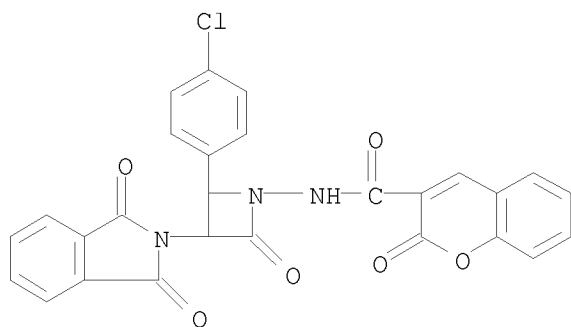
CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-2-oxo-4-phenyl-1-azetidinyl)-2-oxo- (CA INDEX NAME)

10/513699



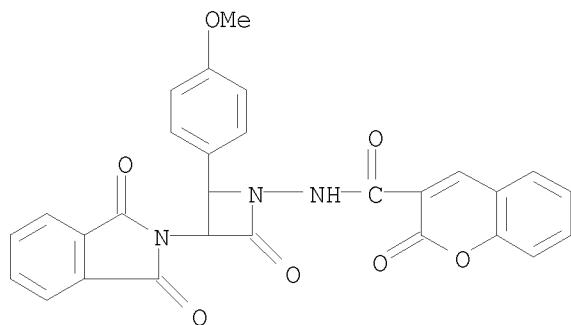
RN 121188-09-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(4-chlorophenyl)-3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-4-oxo-1-azetidiny]-2-oxo- (CA INDEX NAME)



RN 121188-10-1 CAPLUS

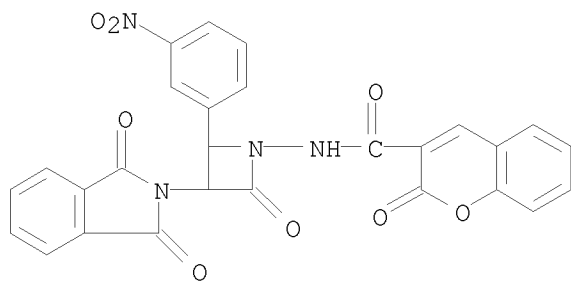
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2-(4-methoxyphenyl)-4-oxo-1-azetidiny]-2-oxo- (CA INDEX NAME)



RN 121188-11-2 CAPLUS

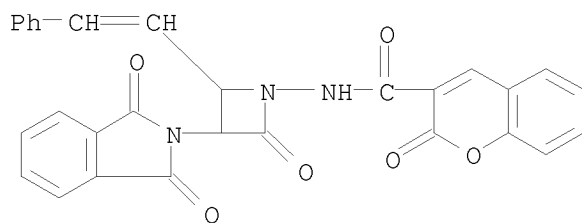
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2-(3-nitrophenyl)-4-oxo-1-azetidiny]-2-oxo- (CA INDEX NAME)

10/513699



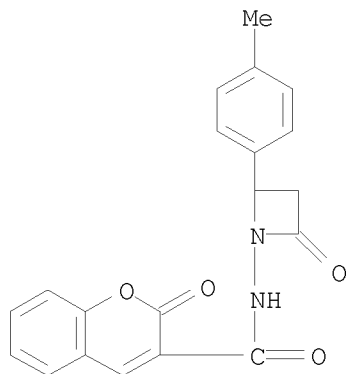
RN 121188-12-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2-oxo-4-(2-phenylethenyl)-1-azetidiny]-2-oxo- (CA INDEX NAME)



RN 121206-87-9 CAPLUS

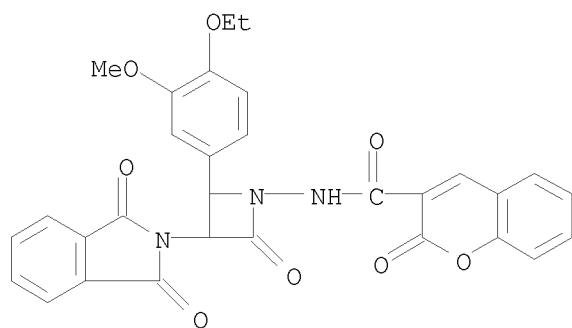
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(4-methylphenyl)-4-oxo-1-azetidiny]-2-oxo- (CA INDEX NAME)



RN 121206-88-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-2-(4-ethoxy-3-methoxyphenyl)-4-oxo-1-azetidiny]-2-oxo- (CA INDEX NAME)

10/513699



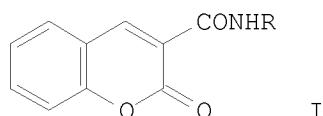
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

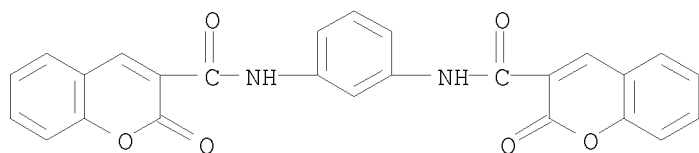
Erich Leese

10/513699

L9 ANSWER 191 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1989:407181 CAPLUS  
DOCUMENT NUMBER: 111:7181  
ORIGINAL REFERENCE NO.: 111:1371a,1374a  
TITLE: Coumarin-3-N-substituted carboxamides with  
antimicrobial and insecticidal activities. Part 2  
AUTHOR(S): El-Agrody, A. M.; Abdul-Ghany, A. R.; Bedair, A. H.;  
Ghazal, S. A.  
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Nasr, Egypt  
SOURCE: Afinidad (1988), 45(417), 447-50  
CODEN: AFINAE; ISSN: 0001-9704  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 111:7181  
GI

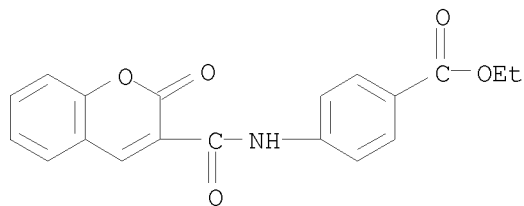


AB Coumarincarboxamides e.g., I (R = CH<sub>2</sub>CH<sub>2</sub>OH, CH<sub>2</sub>CHOHCH<sub>2</sub>OH, CH<sub>2</sub>CH<sub>2</sub>Cl, CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub>, etc.) were prepared from 3-cargethoxycoumarin. Antimicrobial and insecticidal activities of I was determined  
IT 1847-03-6 111947-24-1 111947-26-3  
111947-29-6 111947-30-9 111947-32-1  
111947-33-2 111947-35-4  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (insecticidal activity of)  
RN 1847-03-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,3-phenylenebis[2-oxo- (CA INDEX NAME)

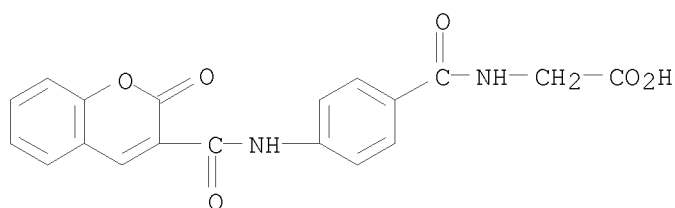


RN 111947-24-1 CAPLUS  
CN Benzoic acid, 4-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)

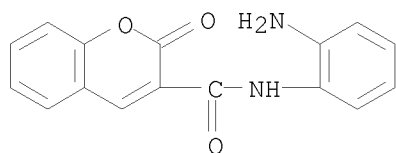
10/513699



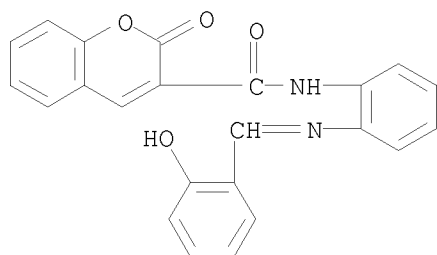
RN 111947-26-3 CAPLUS  
CN Glycine, N-[4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]benzoyl]- (CA INDEX NAME)



RN 111947-29-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminophenyl)-2-oxo- (CA INDEX NAME)

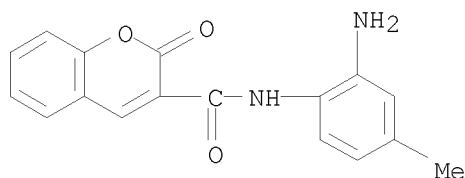


RN 111947-30-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[ (2-hydroxyphenyl)methylene]amino]phenyl]-2-oxo- (CA INDEX NAME)

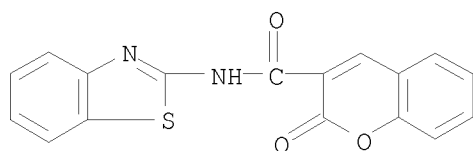


RN 111947-32-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-amino-4-methylphenyl)-2-oxo- (CA INDEX NAME)

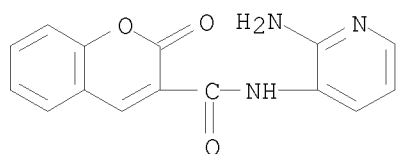
10/513699



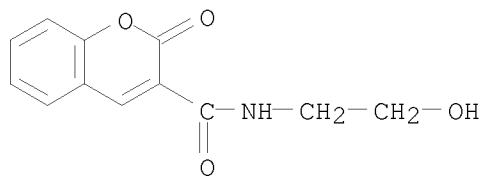
RN 111947-33-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-2-benzothiazolyl-2-oxo- (CA INDEX NAME)



RN 111947-35-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-amino-3-pyridinyl)-2-oxo- (CA INDEX NAME)

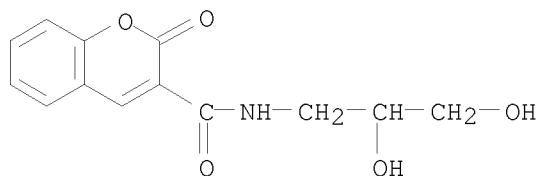


IT 120421-67-2P 120421-68-3P 120421-69-4P  
120421-70-7P 120421-71-8P 120421-74-1P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and antimicrobial activity of)  
RN 120421-67-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-hydroxyethyl)-2-oxo- (CA INDEX NAME)

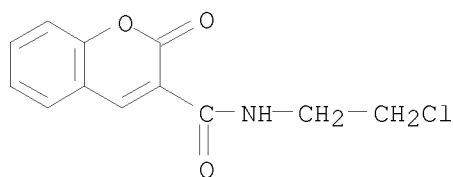


RN 120421-68-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2,3-dihydroxypropyl)-2-oxo- (CA INDEX NAME)

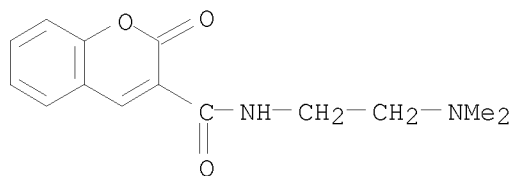
10/513699



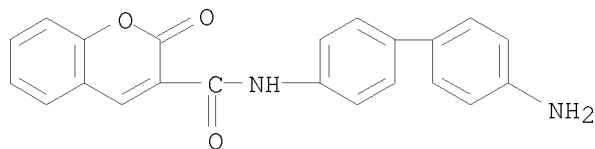
RN 120421-69-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-chloroethyl)-2-oxo- (CA INDEX NAME)



RN 120421-70-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(dimethylamino)ethyl]-2-oxo- (CA INDEX NAME)



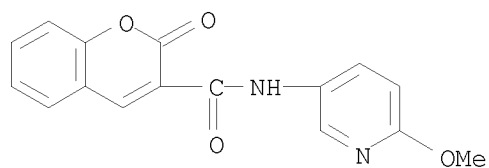
RN 120421-71-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4'-amino[1,1'-biphenyl]-4-yl)-2-oxo- (CA INDEX NAME)



RN 120421-74-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(6-methoxy-3-pyridinyl)-2-oxo- (CA INDEX NAME)



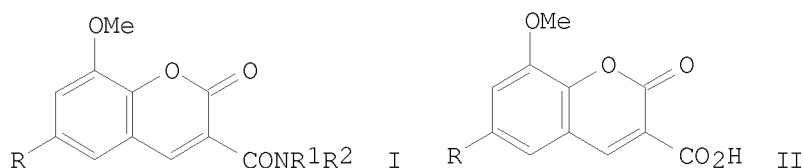
10/513699



OS.CITING REF COUNT: 1

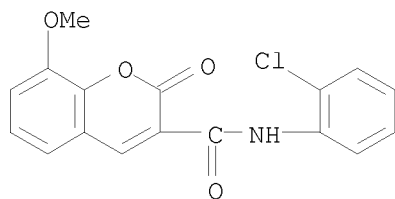
THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 192 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1989:154097 CAPLUS  
 DOCUMENT NUMBER: 110:154097  
 ORIGINAL REFERENCE NO.: 110:25479a,25482a  
 TITLE: Synthesis of some new carboxanilides and amides of  
 8-methoxycoumarin-3-carboxylic acid as possible  
 antifungal and antibacterial agents  
 AUTHOR(S): Shah, Sonal; Mehta, R. H.  
 CORPORATE SOURCE: Fac. Sci., M. S. Univ. Baroda, Baroda, 390 002, India  
 SOURCE: Journal of the Indian Chemical Society (1987  
 ), 64(11), 708-9  
 CODEN: JICSAH; ISSN: 0019-4522  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 110:154097  
 GI



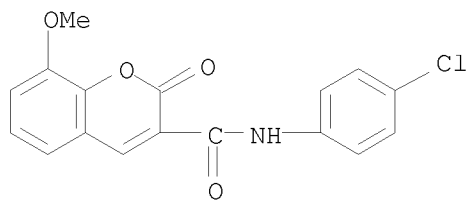
AB Twenty-one coumarincarboxamides I (R = R1 = H, R2 = Ph, substituted Ph,  $\alpha$ -naphthyl,  $\beta$ -naphthyl, cyclohexyl, 4-phenylthiazol-2-yl; R = Br, R1 = H, R2 = 4-BrC6H4; R = H, R1 = R2 = Ph, Et; R1 = Ph, R2 = Et; NR1R2 = morpholino, 4-phenylpiperazino) were prepared from coumarincarboxylic acids II, via acid chlorides. Some I were tested for antifungal and antibacterial activity. I (R = H, Br, R1 = H, R2 = 4-BrC6H4) were active against some fungi. All other I tested were inactive against fungi. All I tested showed no antibacterial activity.

IT 87872-58-0P 87872-59-1P 119686-21-4P  
 119686-23-6P 119686-25-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and antifungal and antibacterial activity of)  
 RN 87872-58-0 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-8-methoxy-2-oxo- (CA  
 INDEX NAME)

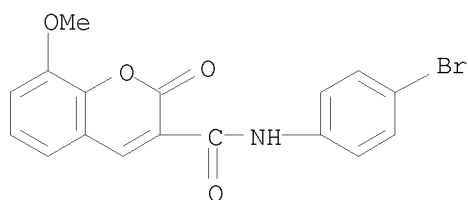


RN 87872-59-1 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-8-methoxy-2-oxo- (CA  
 INDEX NAME)

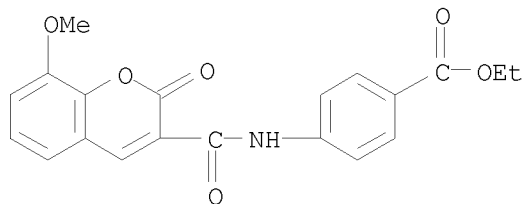
10/513699



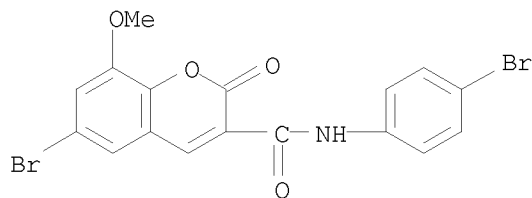
RN 119686-21-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromophenyl)-8-methoxy-2-oxo- (CA INDEX NAME)



RN 119686-23-6 CAPLUS  
CN Benzoic acid, 4-[[ (8-methoxy-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-, ethyl ester (CA INDEX NAME)



RN 119686-25-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-bromophenyl)-8-methoxy-2-oxo- (CA INDEX NAME)



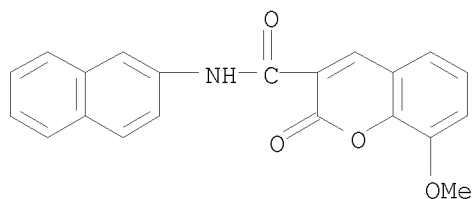
IT 73930-51-5P 87872-54-6P 87872-56-8P  
87872-57-9P 87872-60-4P 119686-22-5P  
119686-24-7P 119686-26-9P 119686-27-0P  
119686-28-1P 120481-31-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)

10/513699

(preparation of)

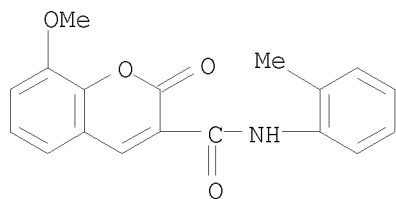
RN 73930-51-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



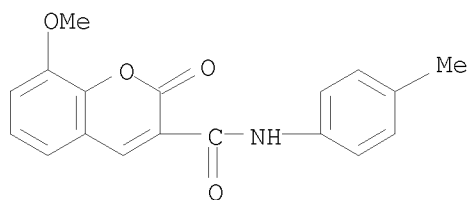
RN 87872-54-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)



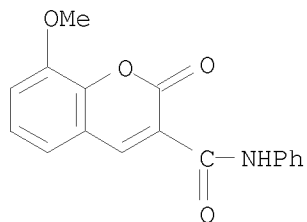
RN 87872-56-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 87872-57-9 CAPLUS

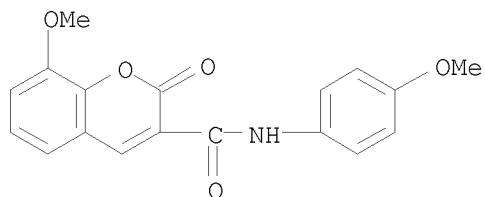
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo-N-phenyl- (CA INDEX NAME)



10/513699

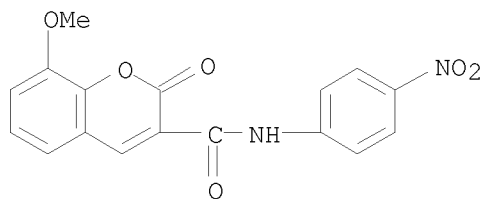
RN 87872-60-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(4-methoxyphenyl)-2-oxo- (CA  
INDEX NAME)



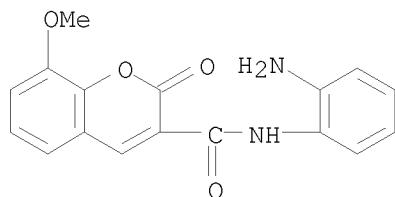
RN 119686-22-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(4-nitrophenyl)-2-oxo- (CA  
INDEX NAME)



RN 119686-24-7 CAPLUS

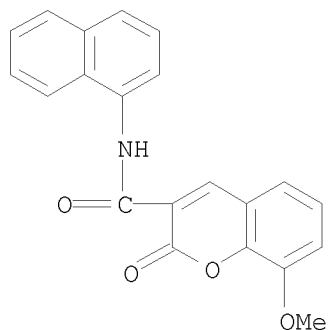
CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminophenyl)-8-methoxy-2-oxo- (CA  
INDEX NAME)



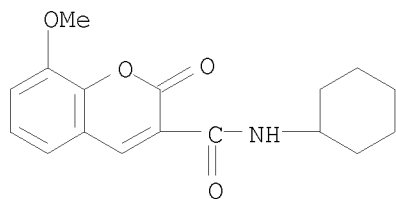
RN 119686-26-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-1-naphthalenyl-2-oxo- (CA  
INDEX NAME)

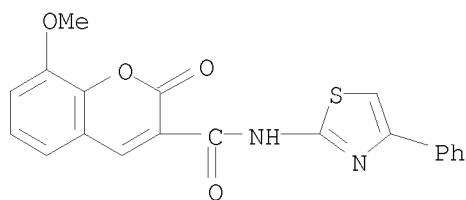
10/513699



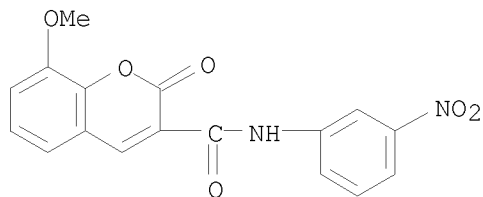
RN 119686-27-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-cyclohexyl-8-methoxy-2-oxo- (CA INDEX NAME)



RN 119686-28-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo-N-(4-phenyl-2-thiazolyl)- (CA INDEX NAME)



RN 120481-31-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(3-nitrophenyl)-2-oxo- (CA INDEX NAME)



10/513699

OS.CITING REF COUNT:       6       THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 193 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1989:115345 CAPLUS  
 DOCUMENT NUMBER: 110:115345  
 ORIGINAL REFERENCE NO.: 110:19045a,19048a  
 TITLE: Preparation of heterocycle-containing low molecular  
 weight polypeptides as renin inhibitors  
 INVENTOR(S): Rosati, Robert L.  
 PATENT ASSIGNEE(S): Pfizer Inc., USA  
 SOURCE: PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8803022	A1	19880505	WO 1986-US2348	19861031 <--
W: FI, HU, US				
HU 49146	A2	19890828	HU 1986-5190	19861031 <--
HU 204285	B	19911230		
IL 84268	A	19920906	IL 1987-84268	19871025 <--
EP 270234	A2	19880608	EP 1987-309462	19871027 <--
EP 270234	A3	19900425		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8705682	A	19880501	DK 1987-5682	19871030 <--
AU 8780540	A	19880526	AU 1987-80540	19871030 <--
AU 578859	B2	19881103		
JP 63146858	A	19880618	JP 1987-275582	19871030 <--
ZA 8708160	A	19890628	ZA 1987-8160	19871030 <--
FI 8902036	A	19890428	FI 1989-2036	19890428 <--
PRIORITY APPLN. INFO.:			WO 1986-US2348	19861031
OTHER SOURCE(S):	MARPAT 110:115345			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; A = Q1-Q4, etc; B = Q5-Q7; D = Q8, ZR; Z = O, NH; R = (substituted) C1-6 alkyl, Ph; Y = Me2CHCH2, CH2:CHCH2; 1 = 0,1] were prepared as renin inhibitors (no data). Endo-3-carboxylic acid, N-methylmorpholine, 2-(2-cyclohexyl)-1-[1-amino-2-(4-imidazolyl)propionamido]-1-[dihydro-4-(2-methoxypropyl)-5-oxo-2H-furan-2-yl]ethane, 1-hydroxybenzotriazole, and DCC were stirred for 40 h to give the coupling product, which was treated with MeNH2 in MeOH for 40 h to give N-methyl-2R,4S,5S-[6-cyclohexyl-4-hydroxy-5-[3-[4-imidazolyl]]-2-[(3-indolecarbonyl)amino]propionamide-2-(2-methylpropyl)]hexanamide.

IT 117483-80-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation of, as renin inhibitor)

RN 117483-80-4 CAPLUS

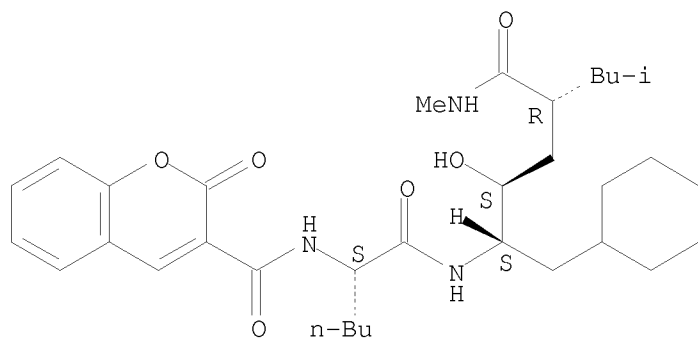
CN 2H-1-Benzopyran-3-carboxamide, N-[1-[[[1-(cyclohexylmethyl)-2-hydroxy-6-methyl-4-[(methylamino)carbonyl]heptyl]amino]carbonyl]pentyl]-2-oxo-,



10/513699

[1S-[1R\*(R\*),2R\*,4S\*]]- (9CI) (CA INDEX NAME)

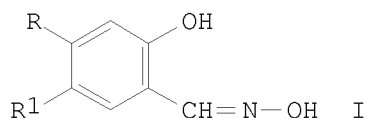
Absolute stereochemistry.



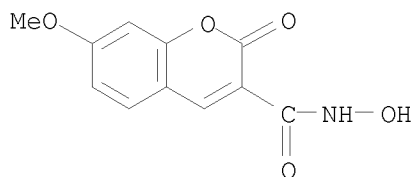
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)  
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 194 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1989:74526 CAPLUS  
DOCUMENT NUMBER: 110:74526  
ORIGINAL REFERENCE NO.: 110:12297a,12300a  
TITLE: Novel reactions of carbon suboxide. Part 8. Kinetic study of the reaction with substituted 2-hydroxybenzaldehyde oximes  
AUTHOR(S): Bonsignore, Leonardo; Loy, Giuseppe; Secci, Mario; Cabiddu, Salvatore; Gelli, Gioanna  
CORPORATE SOURCE: Ist. Chim. Farm. Tossicol. Appl., Univ. Cagliari, Cagliari, I-09124, Italy  
SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1988), (7), 1247-50  
CODEN: JCPKBH; ISSN: 0300-9580  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 110:74526  
GI



AB The kinetics of the reaction of carbon suboxide with aryl-substituted 2-hydroxybenzaldehyde oximes (I; e.g. R = Me, R1 = H; R = H, R1 = Me; R = R1 = H) to give coumarin derivs. were studied. A Hammett plot gave a  $\rho$  value of ca. -1.5, indicating that the reaction was promoted by electron-releasing groups para to the oxime function. Increasing the dielec. constant of the solvent raises the reaction rate. The formation of an ionic intermediate, after fast attack of carbon suboxide on the phenol hydroxy group, is therefore proposed.  
IT 118517-34-3P  
RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, from carbon suboxide and hydroxybenzaldehyde oxime derivative)  
RN 118517-34-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-7-methoxy-2-oxo- (CA INDEX NAME)

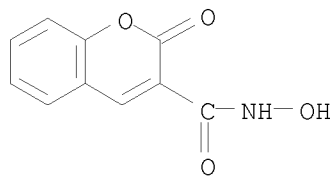


IT 89228-60-4P 89228-63-7P 89228-64-8P  
118517-32-1P  
RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, from carbon suboxide and hydroxybenzaldehyde oxime derivative, kinetics of)

10/513699

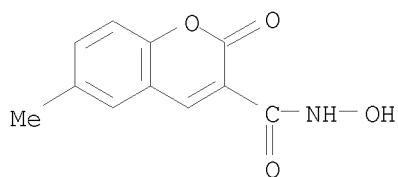
RN 89228-60-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-2-oxo- (CA INDEX NAME)



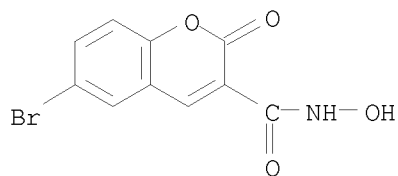
RN 89228-63-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



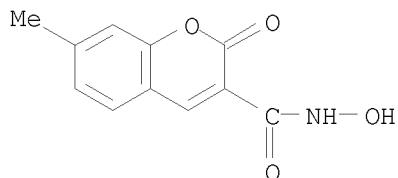
RN 89228-64-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-hydroxy-2-oxo- (CA INDEX NAME)



RN 118517-32-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-7-methyl-2-oxo- (CA INDEX NAME)

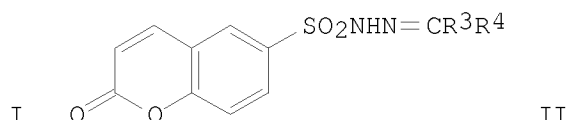
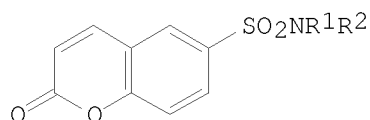


OS.CITING REF COUNT: 7

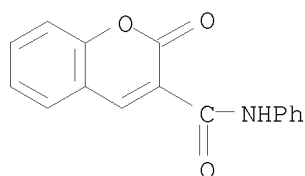
THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

10/513699

L9 ANSWER 195 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1989:57464 CAPLUS  
DOCUMENT NUMBER: 110:57464  
ORIGINAL REFERENCE NO.: 110:9504h,9505a  
TITLE: The chemistry of sulfonylcoumarin derivatives  
AUTHOR(S): Cremlyn, Richard J.; Clowes, Sally M.  
CORPORATE SOURCE: Div. Chem. Sci., Hatfield Polytech.,  
Hatfield/Hertfordshire, AL10 9AB, UK  
SOURCE: Journal of the Chemical Society of Pakistan ( 1988), 10(1), 97-104  
CODEN: JCSPDF; ISSN: 0253-5106  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 110:57464  
GI

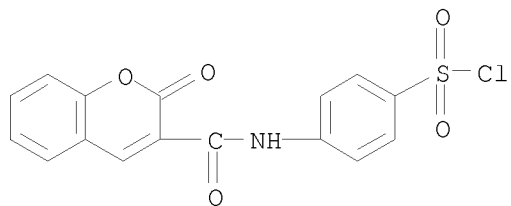


AB 6-(Chlorosulfonyl)coumarin was amidated to give amides I ( $\text{R}^1 = \text{H}$ , alkyl;  $\text{R}^2 = \text{H}$ , alkyl,  $\text{PhCH}_2$ , tolyl; or  $\text{NR}^1\text{R}^2 = \text{morpholino}$ ). Similarly, hydrazones II [ $\text{R}^3 = \text{Me}$ ,  $\text{H}$ ;  $\text{R}^4 = \text{Me}$ ,  $\text{Ph}$ ,  $\text{ClC}_6\text{H}_4$ ,  $\text{O}_2\text{NC}_6\text{H}_4$ ; or  $\text{R}^3\text{R}^4 = (\text{CH}_2)_4$ ] were prepared from the sulfonyl chloride via the resp. hydrazide. Some I and II showed fungicidal activity.  
IT 54396-25-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and chlorosulfonylation of)  
RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

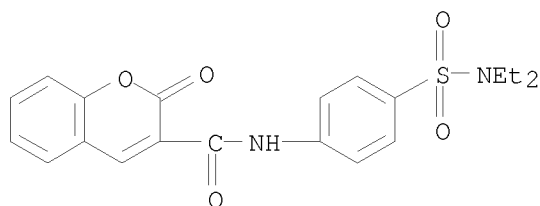


IT 118428-98-1P 118428-99-2P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and fungicidal activity of)  
RN 118428-98-1 CAPLUS  
CN Benzenesulfonyl chloride, 4-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)

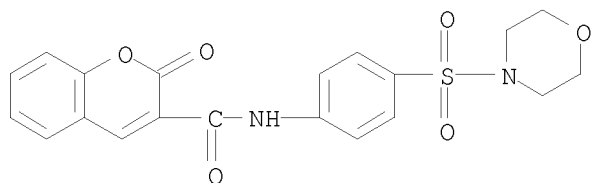
10/513699



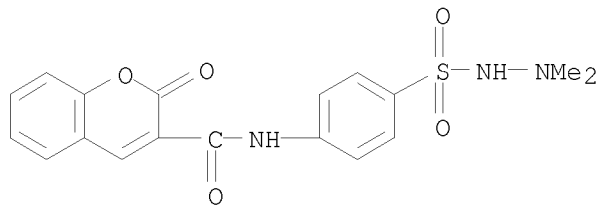
RN 118428-99-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(diethylamino)sulfonyl]phenyl]-2-oxo-  
(CA INDEX NAME)



IT 118429-00-8P 118429-01-9P 118429-02-0P  
118429-03-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 118429-00-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(4-morpholinylsulfonyl)phenyl]-2-oxo-  
(CA INDEX NAME)



RN 118429-01-9 CAPLUS  
CN Benzenesulfonic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
2,2-dimethylhydrazide (CA INDEX NAME)



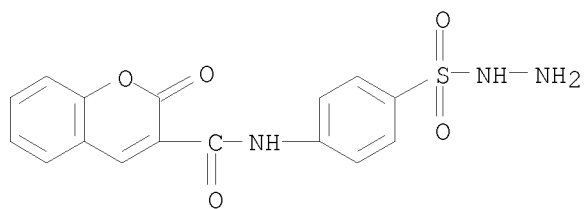
RN 118429-02-0 CAPLUS

<12/04/2007>

Erich Leese

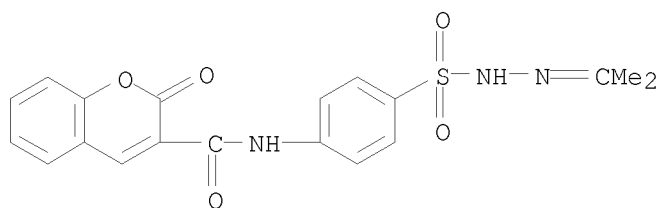
10/513699

CN Benzenesulfonic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, hydrazide (CA INDEX NAME)



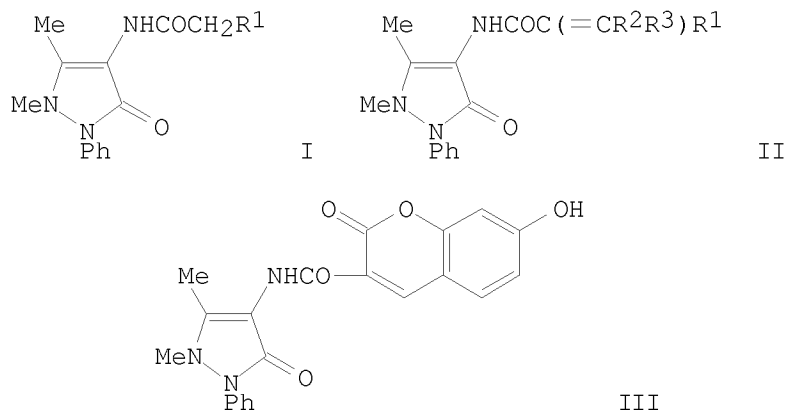
RN 118429-03-1 CAPLUS

CN Benzenesulfonic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, 2-(1-methylethylidene)hydrazide (CA INDEX NAME)

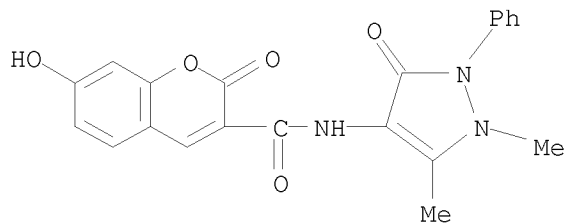


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L9 ANSWER 196 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1988:630878 CAPLUS  
 DOCUMENT NUMBER: 109:230878  
 ORIGINAL REFERENCE NO.: 109:38185a,38188a  
 TITLE: Application of the Knoevenagel condensation to  
 4-acetamidophenazone derivatives  
 AUTHOR(S): El-Kerdawy, M. M.; Farghaly, A. M.; Massoud, M. A.  
 CORPORATE SOURCE: Fac. Pharm., Mansoura Univ., Mansoura, Egypt  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1987  
 ), 26B(12), 1189-91  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:230878  
 GI



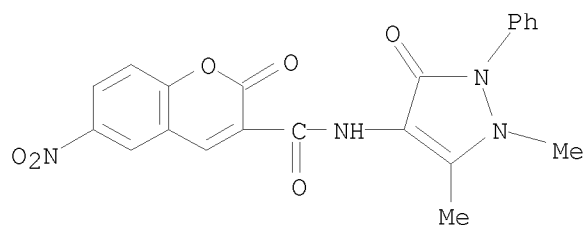
AB Antipyrines I ( $R_1 = \text{CO}_2\text{Et}$ , cyano) were treated with carbonyl compds.  
 (e.g.,  $\text{PhCH:CHCHO}$ , retinal,  $\text{Me}_2\text{CO}$ ,  $\text{MeCOEt}$ , cyclohexanone) and piperidine  
 to give the resp. condensation products II. Coumarin derivative III was  
 obtained from I ( $R_1 = \text{CO}_2\text{Et}$ ) and 2,4-(HO) $2\text{C}_6\text{H}_3\text{CHO}$ .  
 IT 117665-36-8P 117665-37-9P 117665-42-6P  
 117665-43-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 117665-36-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-  
 1H-pyrazol-4-yl)-7-hydroxy-2-oxo- (CA INDEX NAME)



10/513699

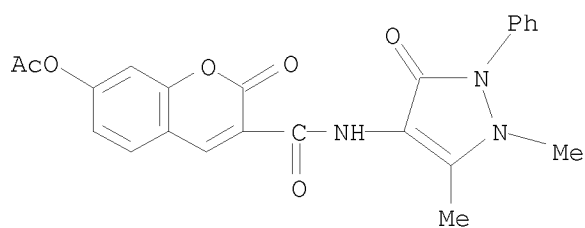
RN 117665-37-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)-6-nitro-2-oxo- (CA INDEX NAME)



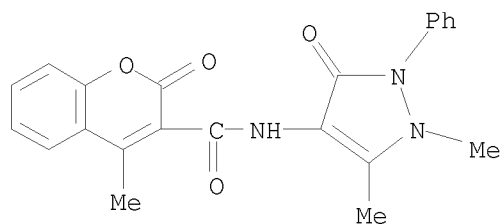
RN 117665-42-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(acetyloxy)-N-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)-2-oxo- (CA INDEX NAME)



RN 117665-43-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)-4-methyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

<12/04/2007>

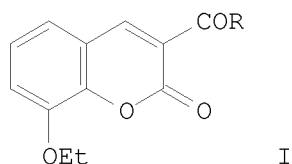
Erich Leese



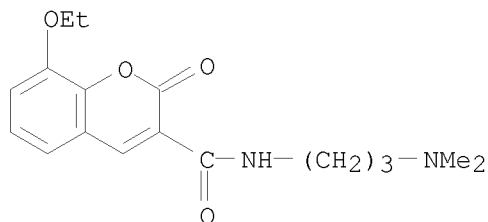
10/513699

L9 ANSWER 197 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1988:610899 CAPLUS  
DOCUMENT NUMBER: 109:210899  
ORIGINAL REFERENCE NO.: 109:34887a,34890a  
TITLE: Preparation of 8-Ethoxycoumarin-3-carboxylates as  
sunscreen agents  
INVENTOR(S): Smidrkal, Jan; Hedrlin, Ivo  
PATENT ASSIGNEE(S): Czech.  
SOURCE: Czech., 3 pp.  
CODEN: CZXXA9  
DOCUMENT TYPE: Patent  
LANGUAGE: Czech  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 246334	B1	19861016	CS 1985-3156	19850430 <--
PRIORITY APPLN. INFO.: GI			CS 1985-3156	19850430

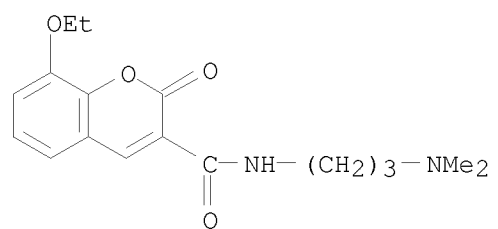


AB Heating 2,3-(HO)(EtO)C<sub>6</sub>H<sub>3</sub>CHO with an equimolar amount of CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> in EtOH containing piperidine for 2 h at 40° gave I (R = OEt) which was refluxed 2 h with H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub> to yield I (R = NHCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub>). I are potentially effective components of creams protective against UV radiation (no data).  
IT 117382-67-9P 117382-68-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as sunscreen agent)  
RN 117382-67-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(dimethylamino)propyl]-8-ethoxy-2-oxo-  
(CA INDEX NAME)



RN 117382-68-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(dimethylamino)propyl]-8-ethoxy-2-oxo-  
, hydrochloride (1:1) (CA INDEX NAME)

10/513699

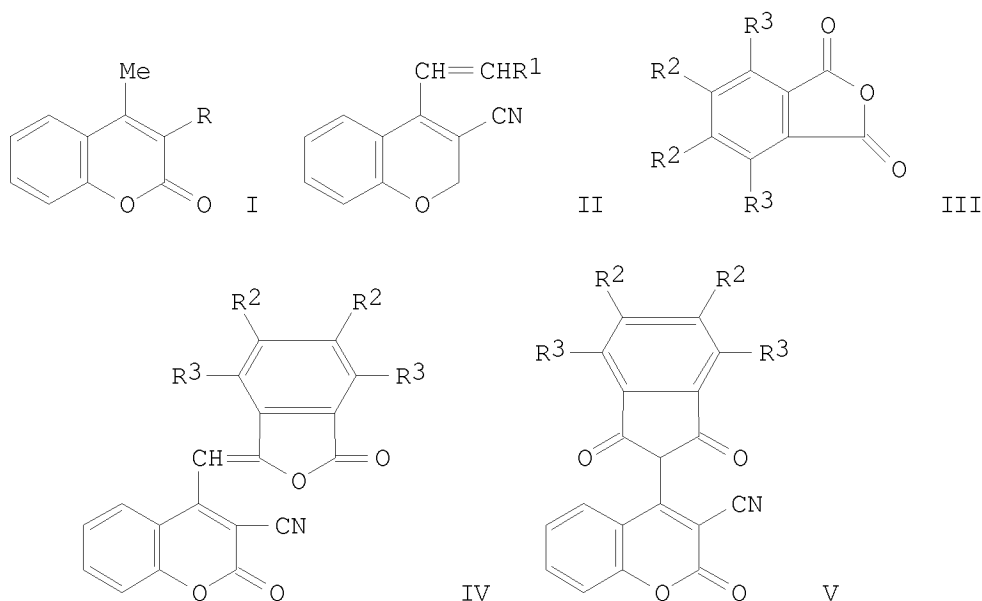


● HCl

<12/04/2007>

Erich Leese

L9 ANSWER 198 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1988:570183 CAPLUS  
 DOCUMENT NUMBER: 109:170183  
 ORIGINAL REFERENCE NO.: 109:28219a,28222a  
 TITLE: Some reactions of 3-cyano-4-methylcoumarin and their derivatives  
 AUTHOR(S): Aly, Fawzy M.; Bedair, Ahmed H.; Selim, Mohamed R.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
 SOURCE: Afinidad (1987), 44(412), 489-91  
 CODEN: AFINAE; ISSN: 0001-9704  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:170183  
 GI



AB The title compound (I, R = cyano) condensed with R<sup>1</sup>CHO [e.g., R<sup>1</sup> = Ph, 4HOC<sub>6</sub>H<sub>4</sub>, 2,4-(HO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, 4-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 2-ClC<sub>6</sub>H<sub>4</sub>] in the presence of AcONa to give styrylcoumarins II (R<sup>1</sup> = as above). Condensation of I (R = cyano) with phthalic anhydrides III (R<sup>2</sup> = R<sup>3</sup> = H, R<sup>2</sup> = H, R<sup>3</sup> = Cl) gave (phthalidylidenemethyl)coumarins IV, whereas III (R<sup>2</sup> = R<sup>3</sup> = Cl, Br) condensed with I (R = cyano) to give (dioxoindanyl)coumarins V. Similar reactions of I (R = CONH<sub>2</sub>, CO<sub>2</sub>H) with aromatic aldehydes and phthalic anhydrides are also described.

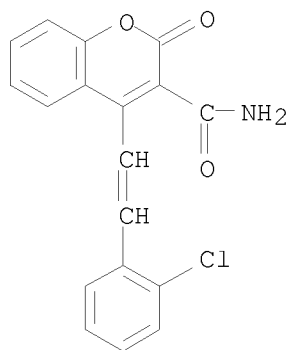
IT 116935-60-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

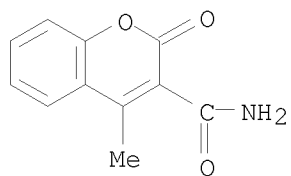
RN 116935-60-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-[2-(2-chlorophenyl)ethenyl]-2-oxo- (CA INDEX NAME)

10/513699

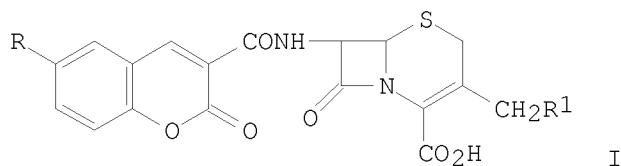


IT 24526-68-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, hydrolysis and condensation of, with aromatic aldehydes and  
tetrahalophthalic anhydride)  
RN 24526-68-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 4-methyl-2-oxo- (CA INDEX NAME)



10/513699

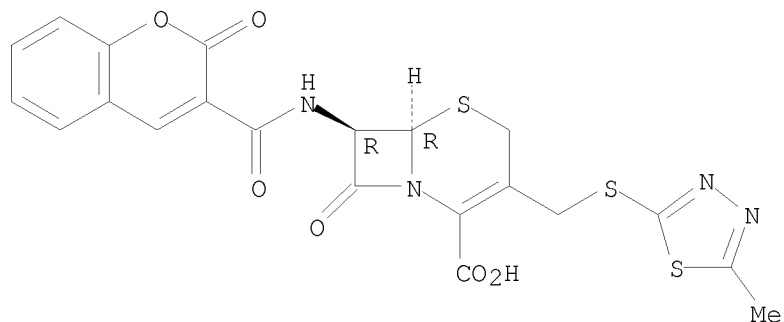
L9 ANSWER 199 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1988:454524 CAPLUS  
DOCUMENT NUMBER: 109:54524  
ORIGINAL REFERENCE NO.: 109:9183a,9186a  
TITLE: Synthesis of 6-substituted-coumarin-3-formamido  
cephalosporins  
AUTHOR(S): Guo, Hong; Duan, Tinghan; Li, Minghua  
CORPORATE SOURCE: Dep. Pharm. Chem., China Pharm. Univ., Nanjing, Peop.  
Rep. China  
SOURCE: Zhongguo Yaoke Daxue Xuebao (1987), 18(3),  
165-8, 1 plate  
CODEN: ZHYXE9; ISSN: 1000-5048  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI



AB Title compds. I (R = H, HO, AcNH, 4-AcNHC6H4SO2NH, ClCH2CONH, NO2; R1 = H, OAc, 2-methyl-1,3,4-thiadiazolyl-5-thio, 1-methyl-1H-tetrazolyl-5-thio) were prepared by condensation of coumarincarboxylic acids with 7-aminocephalosporanic acid derivs. I showed bacteriostatic activity against gram-pos. bacteria, but there was no action against gram-neg. bacteria.  
IT 114810-16-1P 114810-17-2P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)  
RN 114810-16-1 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[[[(5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-8-oxo-7-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (6R-trans)- (9CI) (CA INDEX NAME)

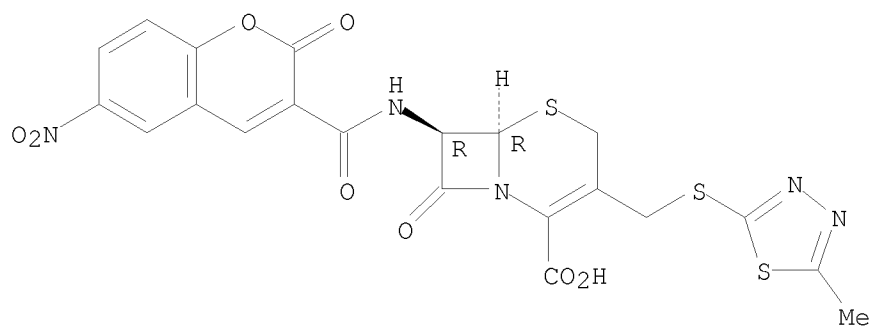
Absolute stereochemistry.

10/513699



RN 114810-17-2 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[ (5-methyl-1,3,4-thiadiazol-2-yl)thio]methyl]-7-[[ (6-nitro-2-oxo-2H-1-  
benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 200 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1988:437821 CAPLUS

DOCUMENT NUMBER: 109:37821

ORIGINAL REFERENCE NO.: 109:6403a,6406a

TITLE: Preparation of 4-[(bicyclic heterocyclyl)methyl]piperidines and analogs as antihistaminics

INVENTOR(S): Janssens, Frans E.; Kennis, Ludo E. J.; Hens, Jozef F.; Torremans, Joseph L. G.; Diels, Gaston S. M.

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: U.S., 59 pp. Cont.-in-part of U.S. Ser. No. 571,135, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

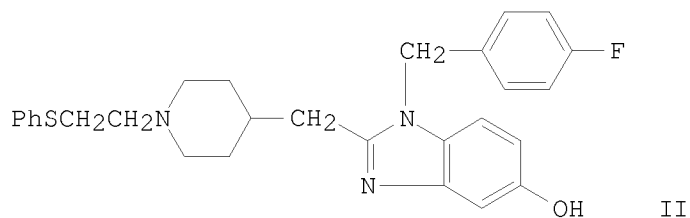
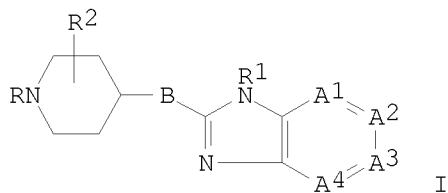
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4695575	A	19870922	US 1985-747754	19850624 <--
AU 8537364	A	19850912	AU 1985-37364	19850107 <--
AU 573673	B2	19880616		
CA 1259609	A1	19890919	CA 1985-471589	19850107 <--
DK 8500089	A	19850710	DK 1985-89	19850108 <--
FI 8500079	A	19850710	FI 1985-79	19850108 <--
FI 83867	B	19910531		
FI 83867	C	19910910		
NO 8500085	A	19850710	NO 1985-85	19850108 <--
NO 160849	B	19890227		
NO 160849	C	19890607		
JP 60185777	A	19850921	JP 1985-479	19850108 <--
JP 07068240	B	19950726		
HU 36471	A2	19850930	HU 1985-61	19850108 <--
HU 200338	B	19900528		
ZA 8500187	A	19860827	ZA 1985-187	19850108 <--
RO 90622	B3	19861210	RO 1985-117252	19850108 <--
SU 1396964	A3	19880515	SU 1985-3836858	19850108 <--
IL 74018	A	19880831	IL 1985-74018	19850108 <--
PL 145710	B1	19881031	PL 1985-251488	19850109 <--
US 4839374	A	19890613	US 1987-94987	19870910 <--

PRIORITY APPLN. INFO.:  
US 1984-569369 A2 19840109  
US 1984-671135 A2 19841113  
US 1985-747754 A3 19850624

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 109:37821

GI



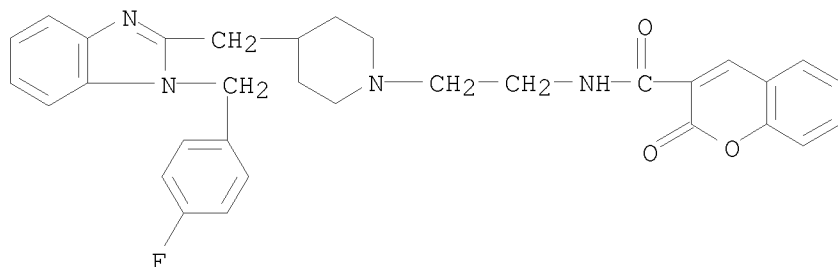
AB The title compds. [I; 3 of A1-A4 = (un)substituted CH, the 4th = N, (un)substituted CH; B = CH<sub>2</sub>, O, SO, SO<sub>2</sub>; R = substituted C1-6 alkyl, alkoxy, alkylthio, amino, pyrrolidinyl, piperidinyl, hexahydroazepinyl, etc.; R<sub>1</sub> = H, alkyl, cycloalkyl, (un)substituted aryl, heteroaryl, (hetero)aralkyl; R<sub>2</sub> = H, alkyl] and their stereoisomers and acid salts were prepared as antihistaminics and serotonin antagonists. 1-[(4-Fluorophenyl)methyl]-2-(4-piperidinylmethyl)-1H-benzimidazol-5-ol and PhSCH<sub>2</sub>CH<sub>2</sub>Br were refluxed 2 h in Me<sub>2</sub>CHCH<sub>2</sub>COMe containing Na<sub>2</sub>CO<sub>3</sub> to give 27.8% benzimidazole derivative (II). I inhibited compound 48/80-induced lethality in rats, caused by histamine release, with ED<sub>50</sub> of 0.005-0.16 mg/kg s.c. or orally. I also inhibited gastric lesions caused by simultaneous release of serotonin.

IT 99962-57-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as antihistaminic)

RN 99962-57-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-[[1-[(4-fluorophenyl)methyl]-1H-benzimidazol-2-yl]methyl]-1-piperidinyl]ethyl]-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)  
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS



10/513699

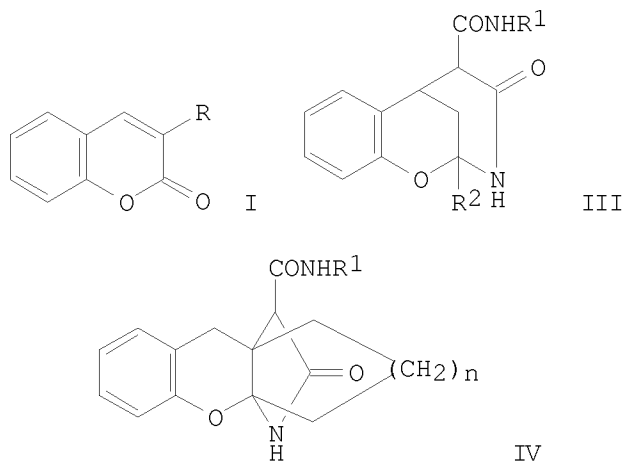
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

<12/04/2007>

Erich Leese

10/513699

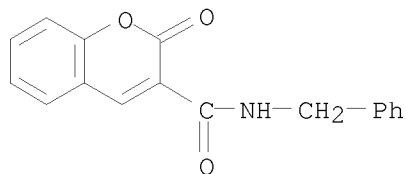
L9 ANSWER 201 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1988:112279 CAPLUS  
DOCUMENT NUMBER: 108:112279  
ORIGINAL REFERENCE NO.: 108:18389a,18392a  
TITLE: Synthesis and studies of 3-N-arylcarbamidocoumarins  
AUTHOR(S): El-Farargy, A. F.; Soliman, A. Y.; El-Mobayed, M.;  
El-Esser, S.  
CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Zagazig, Egypt  
SOURCE: Revue Roumaine de Chimie (1987), 32(4),  
435-41  
CODEN: RRCHAX; ISSN: 0035-3930  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 108:112279  
GI



AB Amidation of 3-carbethoxycoumarin (I, R = CO<sub>2</sub>Et) with R<sub>1</sub>NH<sub>2</sub> (R<sub>1</sub> = PhCH<sub>2</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>) gave carboxamidocoumarins I (R = CONHR<sub>1</sub>, II). Michael cyclocondensation of II with MeCOR<sub>2</sub> (R<sub>2</sub> = Me, Et, CH<sub>2</sub>, CHMe<sub>2</sub>) in the presence of NH<sub>4</sub>OAc gave tetrahydromethanobenzoxazocines III. Similar Michael cyclocondensation of II with cyclopentanone and cyclohexanone gave iminoxanthonecarboxamide derivative IV (n = 1,2).

IT 1846-90-8P 1846-94-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, condensation, and cyclocondensation reactions of, with ketones)

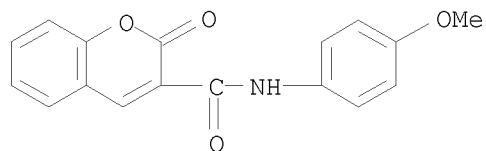
RN 1846-90-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



10/513699

RN 1846-94-2 CAPLUS

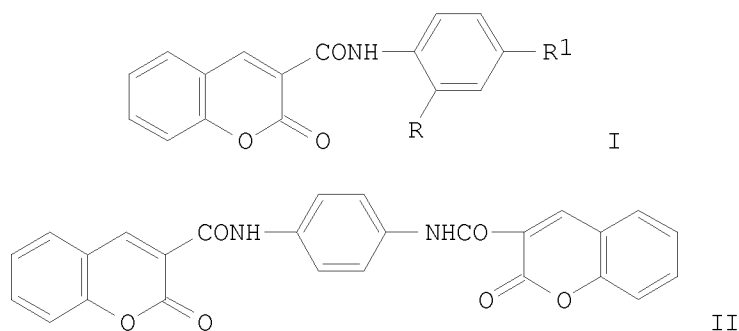
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

10/513699

L9 ANSWER 202 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1988:21670 CAPLUS  
DOCUMENT NUMBER: 108:21670  
ORIGINAL REFERENCE NO.: 108:3671a,3674a  
TITLE: Synthesis of biologically active N-substituted  
3-coumarincarboxamides  
AUTHOR(S): Bedair, A. H.  
CORPORATE SOURCE: Fac. Educ., King-Abdul-Aziz Univ., Madinah Munawwarah,  
Saudi Arabia  
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1987  
, 329(2), 359-64  
CODEN: JPCEAO; ISSN: 0021-8383  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 108:21670  
GI

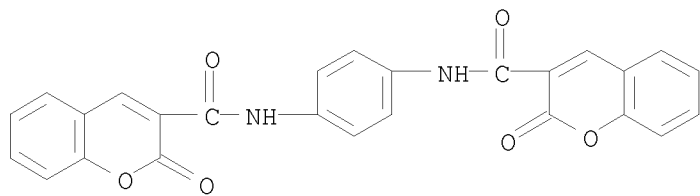


AB Coumarincarboxanilides I (R = H, H<sub>2</sub>N; R<sub>1</sub> = H, Me, CO<sub>2</sub>Et, CH<sub>2</sub>CO<sub>2</sub>H, CONHCH<sub>2</sub>CO<sub>2</sub>H, CONHC<sub>6</sub>H<sub>4</sub>Me-4, CONHCH<sub>2</sub>CO<sub>2</sub>Me) and II were prepared by amidation of 2-carbethoxycoumarin with anilines. II shows both bactericidal and fungicidal activities.

IT 71942-46-6P 111947-25-2P 111947-26-3P  
111947-27-4P 111947-28-5P 111947-30-9P  
111947-31-0P 111947-32-1P 111947-33-2P  
111947-35-4P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal and fungicidal activities of)

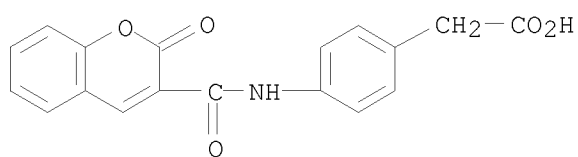
RN 71942-46-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[2-oxo- (CA INDEX NAME)

10/513699



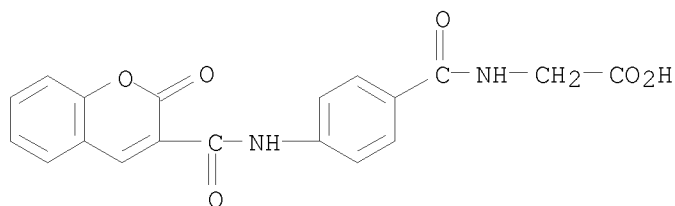
RN 111947-25-2 CAPLUS

CN Benzeneacetic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]benzoyl]- (CA INDEX NAME)



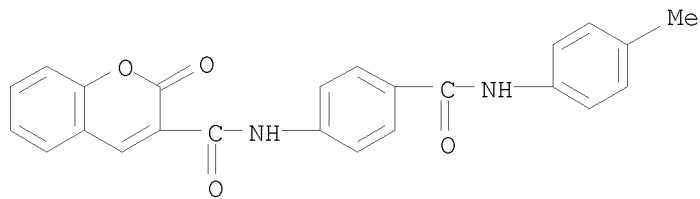
RN 111947-26-3 CAPLUS

CN Glycine, N-[4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]benzoyl]benzoyl]- (CA INDEX NAME)



RN 111947-27-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[[(4-methylphenyl)amino]carbonyl]phenyl]-2-oxo-2H-1-benzopyran-3-carboxamide] (CA INDEX NAME)



RN 111947-28-5 CAPLUS

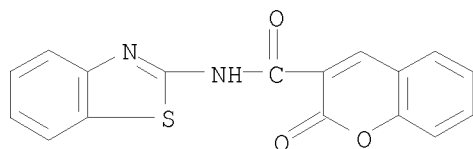
CN Glycine, N-[4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]benzoyl]benzoyl]-, methyl ester (CA INDEX NAME)

COC(=O)NCCNC(=O)c1ccc(cc1)NC(=O)c2cc3ccccc3oc2=OO=C1C(=O)Oc2ccccc2C1C(=O)Nc3ccccc3C=C4C(=O)Nc5ccccc54Oc1ccc(cc1)/C=N/c2ccccc2C(=O)Oc3ccccc3Cc1cccc(N)c1NC(=O)c2cc3ccccc3oc2=O

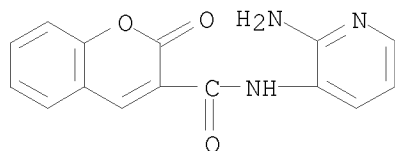
<12/04/2007>

Erich Leese

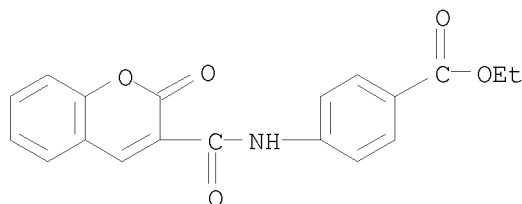
10/513699



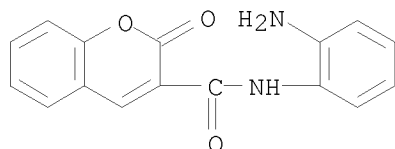
RN 111947-35-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-amino-3-pyridinyl)-2-oxo- (CA INDEX NAME)



IT 111947-24-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, bactericidal and fungicidal activities, and condensation reaction of, with toluidine)  
RN 111947-24-1 CAPLUS  
CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



IT 111947-29-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, bactericidal and fungicidal activities, and condensation reactions of, with hydroxybenzaldehydes)  
RN 111947-29-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminophenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

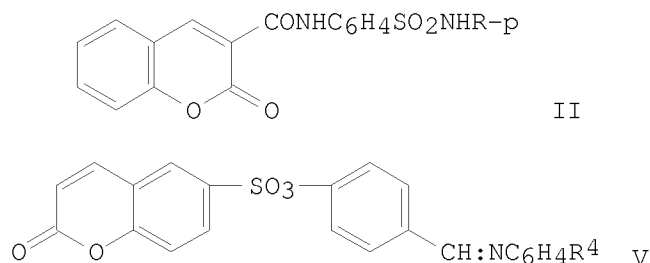
10/513699

<12/04/2007>

Erich Leese



L9 ANSWER 203 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1987:636438 CAPLUS  
 DOCUMENT NUMBER: 107:236438  
 ORIGINAL REFERENCE NO.: 107:37977a,37980a  
 TITLE: Biologically active sulfonamides derived from  
 $\alpha$ -pyrones  
 AUTHOR(S): Bedair, A. H.; Aly, F. M.; El-Assy, R. K. M.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Nasr, Egypt  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1987  
 ), 26B(1), 91-4  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 107:236438  
 GI



AB Amidation of 3-carbethoxycoumarin (I) and p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NHR [e.g., R = H, o-, m-, and p-tolyl, CH<sub>2</sub>Ph, C(NH<sub>2</sub>):NH] gave R<sub>1</sub>CONHC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>NHR-p (II) (same R; R<sub>1</sub> = coumarin-3-yl). Treatment of I with p-H<sub>2</sub>NNHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NHAc gave R<sub>1</sub>CONHNHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>R<sub>2</sub> III (same R<sub>1</sub>; R<sub>2</sub> = NHAc-p), which was converted to III (R<sub>2</sub> = N:CHPh-p) with PhCHO after hydrolysis. Substitution reaction of 6-coumarinsulfonyl chloride (= R<sub>3</sub>SO<sub>2</sub>Cl) with p- or o-HOC<sub>6</sub>H<sub>4</sub>CHO gave R<sub>3</sub>SO<sub>3</sub>C<sub>6</sub>H<sub>4</sub>CHO-p (IV) or -o, resp. IV was converted to Schiff bases V (R<sub>4</sub> = o-NO<sub>2</sub>, p-Me) with R<sub>4</sub>C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> (same R<sub>4</sub>). Similar reactions occurred starting with 3-carbethoxy-5,6-benzocoumarin. II (R = H, o-tolyl), IV, and V showed bactericidal activity.

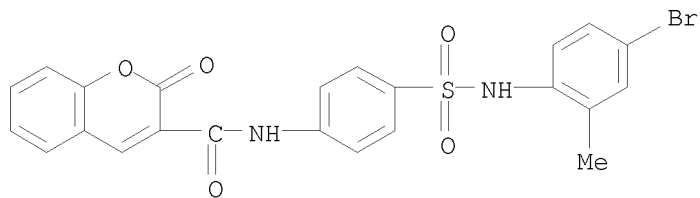
IT 111456-08-7P 111456-09-8P 111456-10-1P  
 111456-11-2P 111456-15-6P 111456-16-7P  
 111456-17-8P 111456-18-9P 111456-19-0P  
 111456-30-5P 111456-31-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and bactericidal activity of)

RN 111456-08-7 CAPLUS

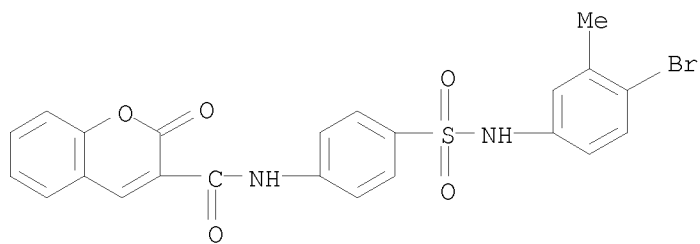
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(4-bromo-2-methylphenyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)

10/513699



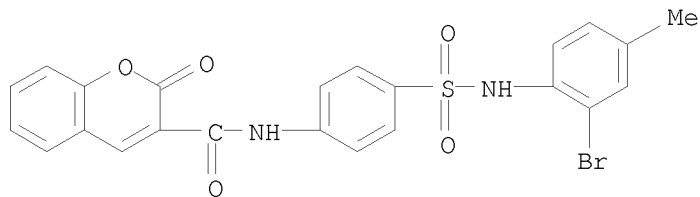
RN 111456-09-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[4-bromo-3-methylphenyl]amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



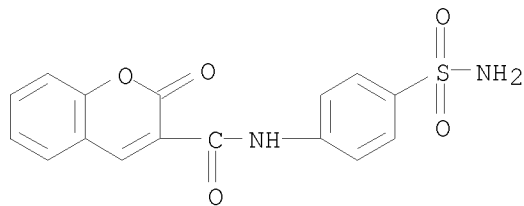
RN 111456-10-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[2-bromo-4-methylphenyl]amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 111456-11-2 CAPLUS

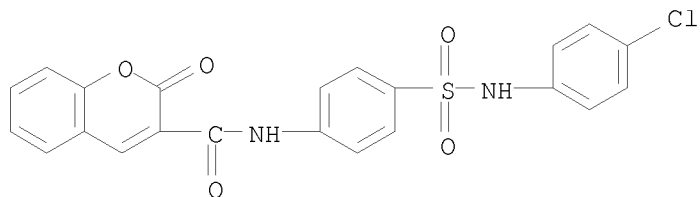
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(aminosulfonyl)phenyl]-2-oxo- (CA INDEX NAME)



RN 111456-15-6 CAPLUS

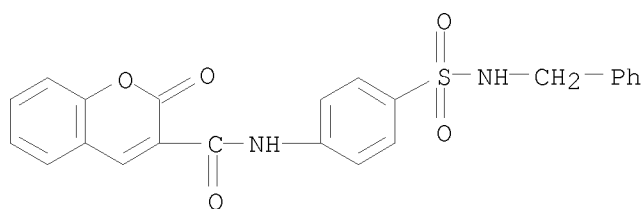
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[4-chlorophenyl]amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)

10/513699



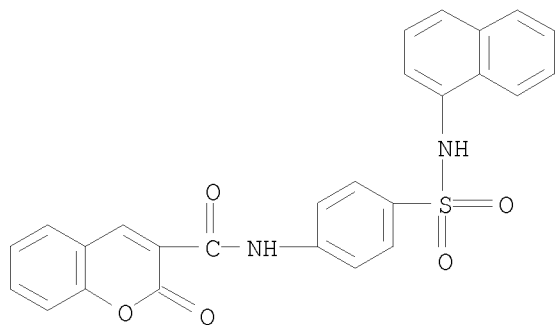
RN 111456-16-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-  
[[ (phenylmethyl) amino] sulfonyl] phenyl]- (CA INDEX NAME)



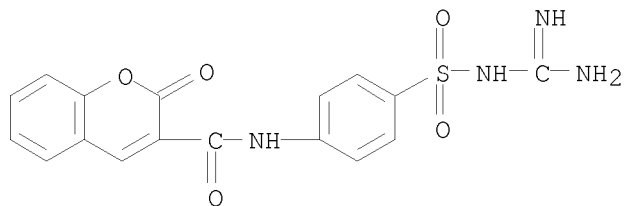
RN 111456-17-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(1-naphthalenylamino) sulfonyl] phenyl]-  
2-oxo- (CA INDEX NAME)



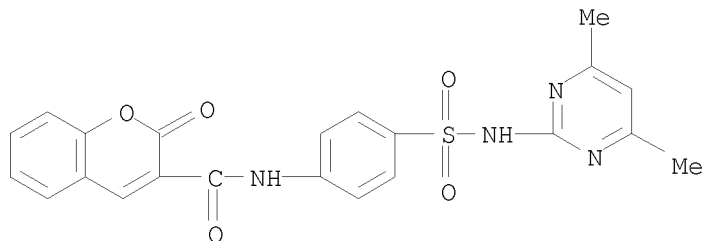
RN 111456-18-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-  
[[ (aminoiminomethyl) amino] sulfonyl] phenyl]- 2-oxo- (CA INDEX NAME)

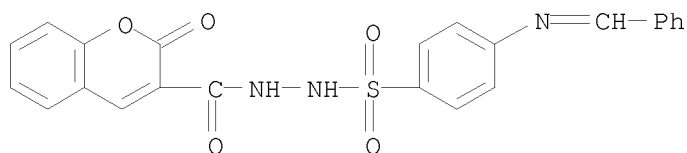


10/513699

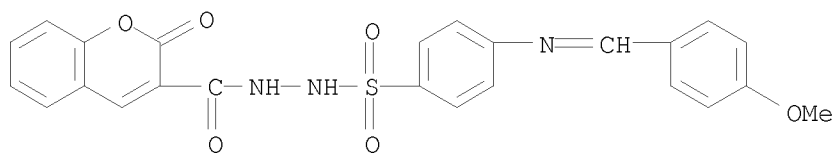
RN 111456-19-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[[4,6-dimethyl-2-pyrimidinyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



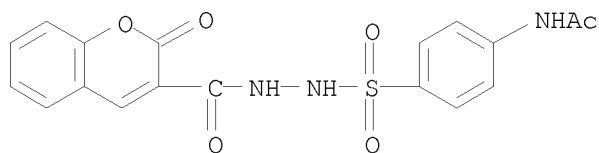
RN 111456-30-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[4-[(phenylmethylene)amino]phenyl]sulfonyl]hydrazide (CA INDEX NAME)



RN 111456-31-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[4-[[4-methoxyphenyl)methylene]amino]phenyl]sulfonyl]hydrazide (CA  
INDEX NAME)



IT 111456-24-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, bactericidal activity, and acidic hydrolysis of)  
RN 111456-24-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[[4-(acetylamino)phenyl]sulfonyl]hydrazide (CA INDEX NAME)



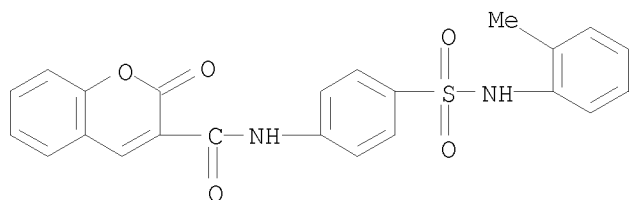
IT 111456-12-3P 111456-13-4P 111456-14-5P

10/513699

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, bactericidal activity, and bromination of)

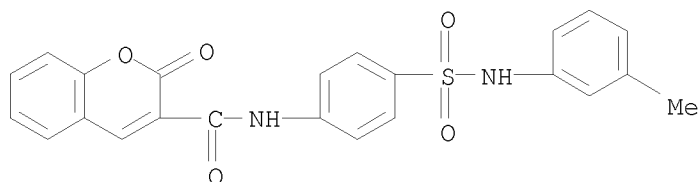
RN 111456-12-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(2-methylphenyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



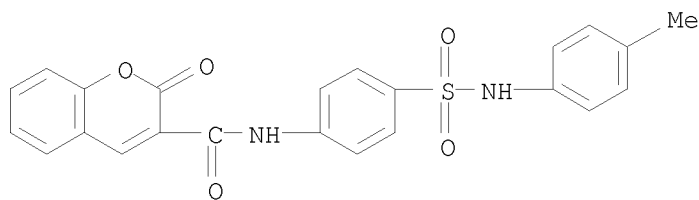
RN 111456-13-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(3-methylphenyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 111456-14-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[(4-methylphenyl)amino]sulfonyl]phenyl]-2-oxo- (CA INDEX NAME)



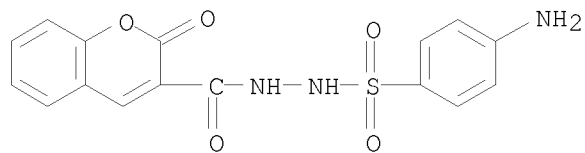
IT 111456-26-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, bactericidal activity, and imination with, of benzaldehydes)

RN 111456-26-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(4-aminophenyl)sulfonyl]hydrazide (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L9 ANSWER 204 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1987:583668 CAPLUS  
 DOCUMENT NUMBER: 107:183668  
 ORIGINAL REFERENCE NO.: 107:29365a,29368a  
 TITLE: Solvent optimization of reversed-phase  
 high-performance liquid chromatographic separation by  
 orthogonal design  
 AUTHOR(S): Duan, Ling; Xiang, Bingren; Sheng, Longsheng; Wu,  
 Rujin; An, Dengkui  
 CORPORATE SOURCE: Div. Pharm. Anal., China Pharm. Univ., Nanjing, Peop.  
 Rep. China  
 SOURCE: Zhongguo Yaoke Daxue Xuebao (1987), 18(2),  
 126-9  
 CODEN: ZHYXE9; ISSN: 1000-5048  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese

AB A simple rapid orthogonal design procedure for optimization of mobile  
 phase selectivity used in reversed-phase HPLC was described. In  
 reversed-phase HPLC separation of 10 structurally related cephalosporins with  
 orthogonal design, 3 factors including (1) HOAc, (2) MeOH and (3) MeN-H<sub>2</sub>O  
 were tested. HOAc had the greatest effect on separation of cephalosporins.  
 The method for optimization of mobile phase selectivity provided increased  
 problem-solving capability and decreased the anal. time.

IT 102330-32-5 102330-33-6 102330-36-9  
 102330-41-6 107747-64-8 107747-66-0  
 110954-89-7

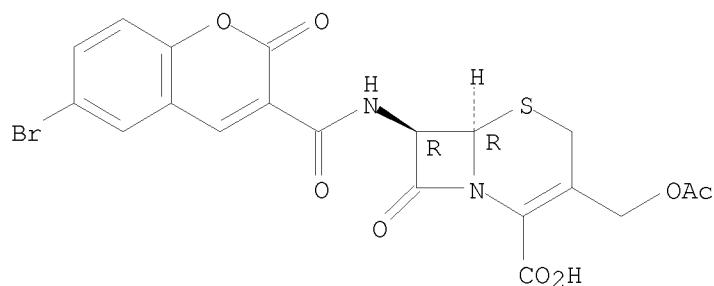
RL: ANST (Analytical study)

(HPLC separation of, solvent optimization in, by orthogonal design)

RN 102330-32-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[6-bromo-2-oxo-2H-1-benzopyran-3-  
 yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

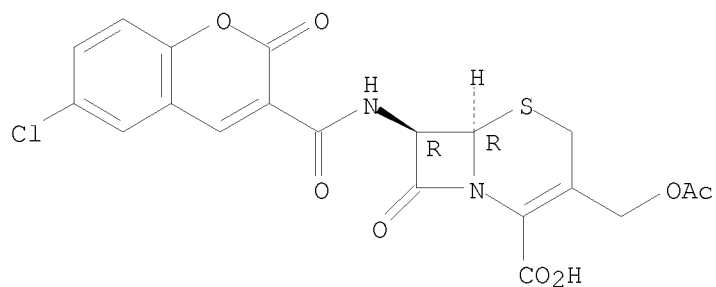


RN 102330-33-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-7-[[6-chloro-2-oxo-2H-1-benzopyran-3-  
 yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

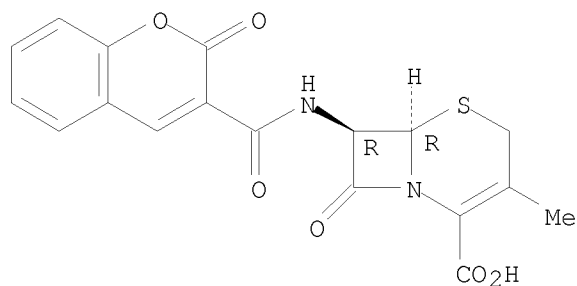
10/513699



RN 102330-36-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-methyl-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
(6R-trans)- (9CI) (CA INDEX NAME)

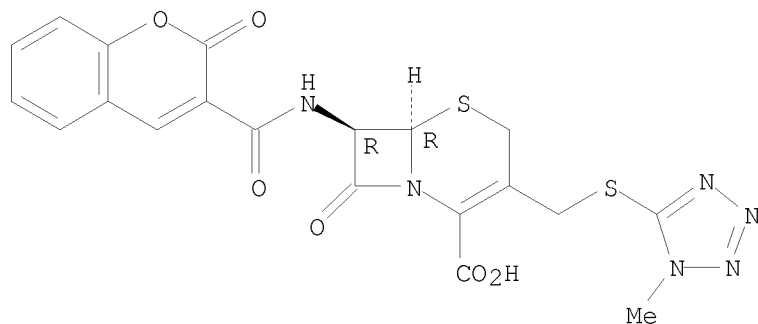
Absolute stereochemistry.



RN 102330-41-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[ (1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-7-[[ (2-oxo-2H-1-  
benzopyran-3-yl)carbonyl]amino]-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



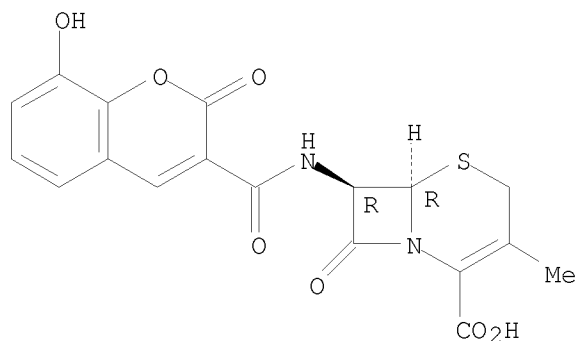
RN 107747-64-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-8-oxo-  
(6R-trans)- (9CI) (CA INDEX NAME)



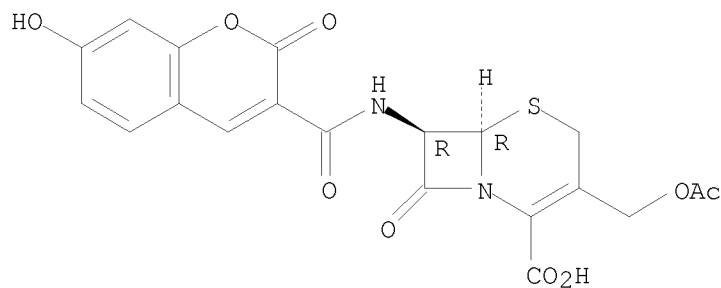
10/513699

Absolute stereochemistry.



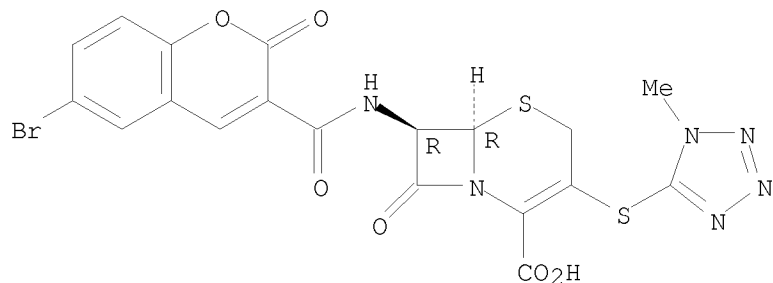
RN 107747-66-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 110954-89-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[(1-methyl-1H-tetrazol-5-yl)thio]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

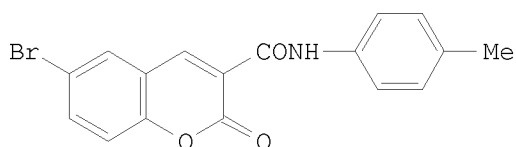
10/513699

<12/04/2007>

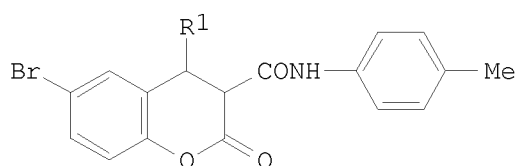
Erich Leese

10/513699

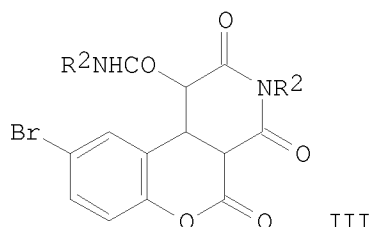
L9 ANSWER 205 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1987:575835 CAPLUS  
DOCUMENT NUMBER: 107:175835  
ORIGINAL REFERENCE NO.: 107:28219a,28222a  
TITLE: Reactions of 3-[N-(p-tolylcarbamido)]-6-bromocoumarin.  
Synthesis of 4-substituted 3,4-dihydrocoumarins,  
4 $\alpha$ -chromeneacetic acid, benzopyranopyridones,  
and 3,4,5,6-tetrahydro-1,3-benzoxazocine derivatives  
AUTHOR(S): El-Kady, M.; Sayed, G. H.; Saleh, R. M.; Mosa, Hoda M.  
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
SOURCE: Egyptian Journal of Chemistry (1986), Volume  
Date 1985, 28(1), 19-28  
CODEN: EGJCA3; ISSN: 0367-0422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 107:175835  
GI



I



II



III

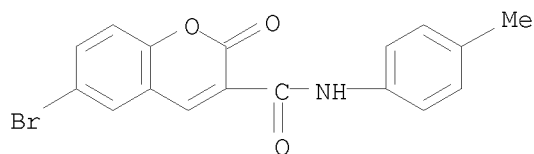
AB Coumarincarboxamide derivative I was converted to dihydrocoumarins II (R1 = alkyl, aryl, cyclohexyl) and benzopyranopyridines III (R2 = Ph, tolyl, PhCH2). The reaction of I with EtMgI gave II (R1 = Et). III (R2 = Ph) was obtained from I, CH2(CO2Et)2, and PhNH2.

IT 38485-85-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reactions of)

RN 38485-85-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-methylphenyl)-2-oxo- (CA  
INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

<12/04/2007>

Erich Leese

10/513699

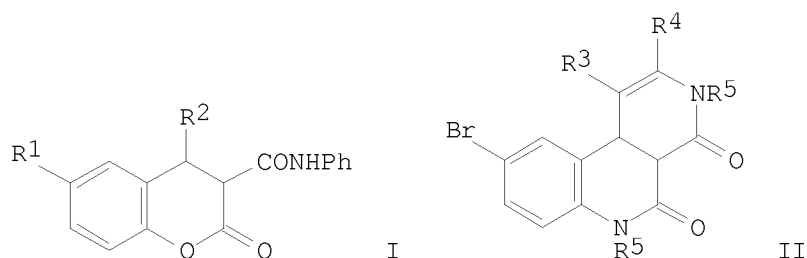
(1 CITINGS)

<12/04/2007>

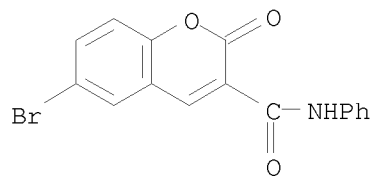
Erich Leese

10/513699

L9 ANSWER 206 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1987:515463 CAPLUS  
DOCUMENT NUMBER: 107:115463  
ORIGINAL REFERENCE NO.: 107:18711a,18714a  
TITLE: Action of Grignard reagents and of ketones on  
3-phenylcarbamoyl coumarins. Spectral data of the  
products  
AUTHOR(S): El-Kady, M.; Sayed, G. H.; El-Gendy, A. M.; El-Sherif,  
M.  
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Egypt  
SOURCE: Egyptian Journal of Chemistry (1986), Volume  
Date 1985, 28(1), 63-70  
CODEN: EGJCA3; ISSN: 0367-0422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 107:115463  
GI

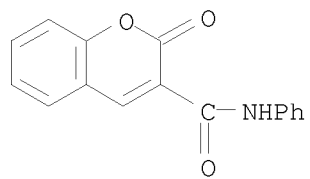


AB Coumarin-3-carboxamides were alkylated and arylated by Grignard reagents  
to yield I (R1 = H, Br; R2 = alkyl, aryl, PhCH2). Also prepared from  
coumarincarboxamides were benzonaphthyridines II (R3 = H, Me; R4 = Me, Et;  
R5 = H, Et).  
IT 38485-82-4 54396-25-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(alkylation and arylation of, by Grignard reagents)  
RN 38485-82-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-phenyl- (CA INDEX NAME)



RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:

3

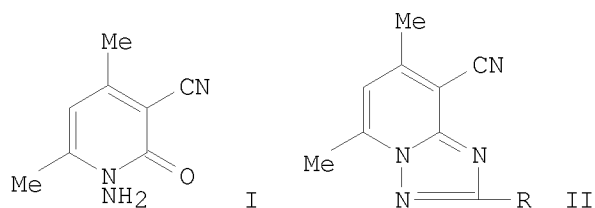
THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

<12/04/2007>

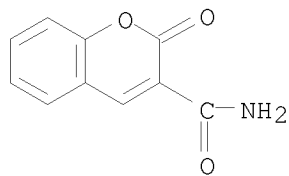
Erich Leese

10/513699

L9 ANSWER 207 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1987:196339 CAPLUS  
DOCUMENT NUMBER: 106:196339  
ORIGINAL REFERENCE NO.: 106:31829a,31832a  
TITLE: A novel, one-step synthesis of  
[1,2,4]triazolo[1,5-a]pyridine derivatives  
AUTHOR(S): Phadke, R. C.; Rangnekar, D. W.  
CORPORATE SOURCE: Dep. Chem. Technol., Univ. Bombay, Bombay, 400 019,  
India  
SOURCE: Synthesis (1986), (10), 860-2  
CODEN: SYNTBF; ISSN: 0039-7881  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 106:196339  
GI



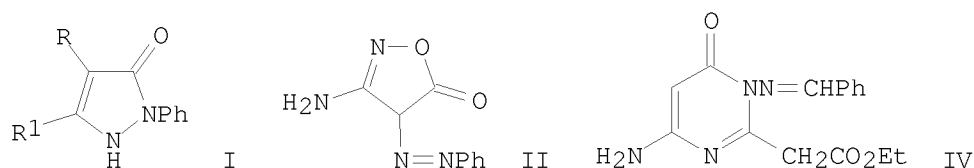
AB Cyclization of pyridone I with RCONH<sub>2</sub> (R = H, Me, Ph, styryl, 3-coumarinyl) in DMF in the presence of ZnCl<sub>2</sub> gave 64-79% title compds. (II).  
IT 1846-78-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of, with aminopyridones)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



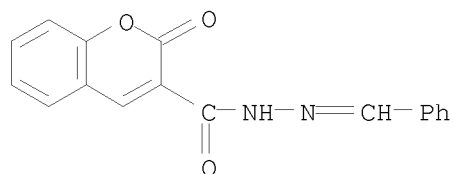
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 208 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1987:176237 CAPLUS  
DOCUMENT NUMBER: 106:176237  
ORIGINAL REFERENCE NO.: 106:28601a,28604a  
TITLE: Nitriles in heterocyclic synthesis: new approaches to  
the synthesis of pyrazoles, isoxazoles, and  
pyrimidines  
AUTHOR(S): Ibrahim, Nadia S.; Hafez, Ebtisam A. A.; Mohareb,  
Raafat M.  
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt  
SOURCE: Heterocycles (1986), 24(8), 2085-8  
CODEN: HTCYAM; ISSN: 0385-5414  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 106:176237  
GI



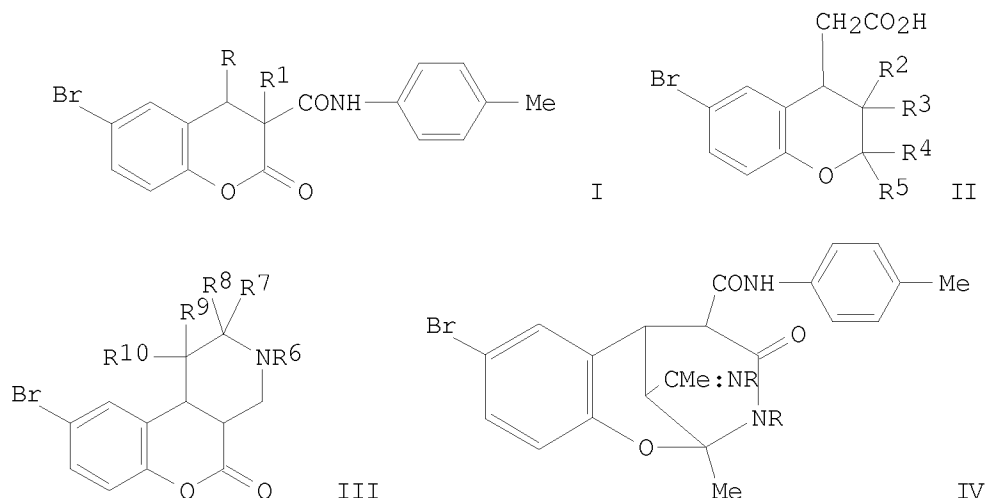
AB A variety of pyrazoles e.g. I (R = CONH<sub>2</sub>, R<sub>1</sub> = CCl<sub>3</sub>; R = cyano, R<sub>1</sub> = NH<sub>2</sub>)  
and aminoisoxazole II were prepared from reaction of derivs. of  
NCCH<sub>2</sub>CONHN:CHPh (III) with hydrazines and hydroxylamine. A novel  
pyrimidine IV was prepared by the reaction of Et cyanoacetate with III.  
IT 107552-15-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 107552-15-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-(phenylmethylene)hydrazide  
(CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)



L9 ANSWER 209 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1987:156227 CAPLUS  
 DOCUMENT NUMBER: 106:156227  
 ORIGINAL REFERENCE NO.: 106:25421a,25424a  
 TITLE: Behavior of 3-(N-p-tolylcarbamido)-6-bromocoumarins  
 towards Grignard reagents and Michael reaction  
 AUTHOR(S): El-Kady, M.; Sayed, G. H.; Saleh, R. M.; Mosa, Hoda M.  
 CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
 SOURCE: Journal of the Chemical Society of Pakistan ( 1986), 8(2), 91-6  
 CODEN: JCSPDF; ISSN: 0253-5106  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 106:156227  
 GI



AB Dihydrocoumarins I (R = Me, Et, Ph, 2-, 4-MeOC6H4, cyclohexyl; R1 = H) were prepd by the reaction of I (RR1 = bond) with Grignard reagents. Coumarinacetic acids II [R2,R3 = H, R4R5 = O; R3R4 = bond, R2,R5 = Me, Et; R2R5 = (CH2)5] were prepd by Michael condensation of I (RR1 = bond) with CH2(CO2Et)2 or R2R5CO in presence of NaOEt. Michael condensation of I (RR1 = bond) with CH2(CO2Et)2, AcCH2CO2Et, or with R2R5CO in presence of R6NH2 (R6 = Ph, 4-MeC6H4, PhCH2) gave benzopyranopyridines III (R7R8 = O, R9 = H, R10 = R6 NHCO; R7 = Me, Et; R8R9 = bond; R7, R10 = R2, R5). Benzoxazocines IV were prepd by the reaction of (MeCO)2CH2 with I (RR1 = bond) in presence of R6NH2.

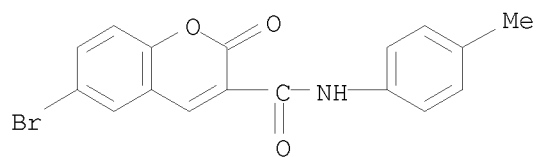
IT 38485-85-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with Grignard reagents)

RN 38485-85-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)

10/513699

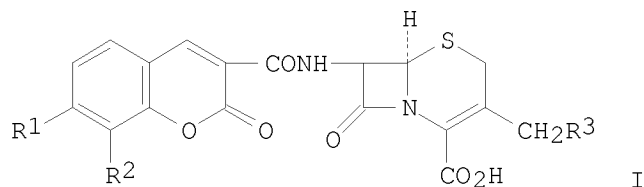


OS.CITING REF COUNT: 3

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 210 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1987:152851 CAPLUS  
DOCUMENT NUMBER: 106:152851  
ORIGINAL REFERENCE NO.: 106:24849a,24852a  
TITLE: Antibiotics of semisynthetic cephalosporins. II.  
Synthesis of 7-(7- or 8-substituted  
coumarinyl-3-formamido)-cephalosporins  
AUTHOR(S): Xia, Wenshui; Duan, Tinghan; Li, Minghua  
CORPORATE SOURCE: Dep. Pharm. Chem., Nanjing Coll. Pharm., Nanjing,  
Peop. Rep. China  
SOURCE: Yaoxue Xuebao (1986), 21(11), 816-22  
CODEN: YHHPAL; ISSN: 0513-4870  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI



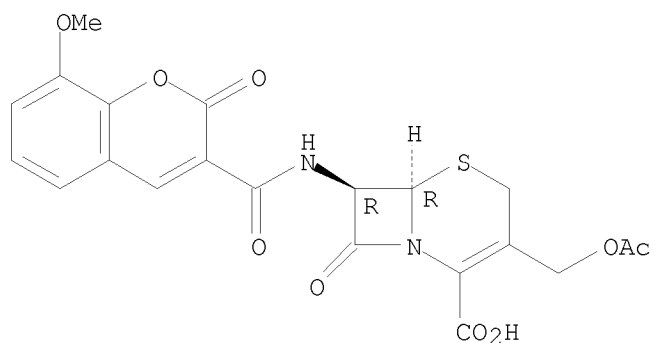
AB A series of title compds. [I, R1 = H, OH, or OMe, R2 = H, Cl, OH, or OMe and R3 = H, OAc, or 1-methyl-5-tetrazolylthio (Q)] were prepared from the appropriate cephalosporanic acid derivative and corresponding coumarin-3-carboxylic acids which were prepared from substituted salicylaldehydes and malonic acid (or its ester) by Knoevenagel condensation. The following I exhibited good sensitivity against *Staphylococcus aureus* which was resistant to other antibiotics: (R1, R2 and R3 of I given): H, Cl, OAc; H, Cl, Q; H, OMe, OAc; H, OMe, Q; H, OH, OAc; H, OH, Q.

IT 107747-53-5P 107747-54-6P 107747-55-7P  
107747-57-9P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 107747-53-5 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

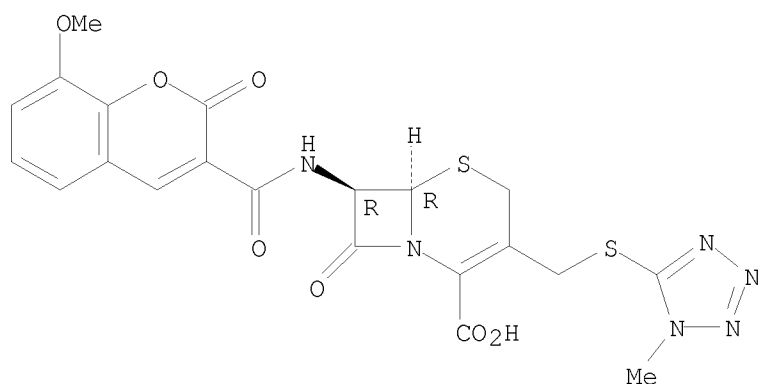
Absolute stereochemistry.

10/513699



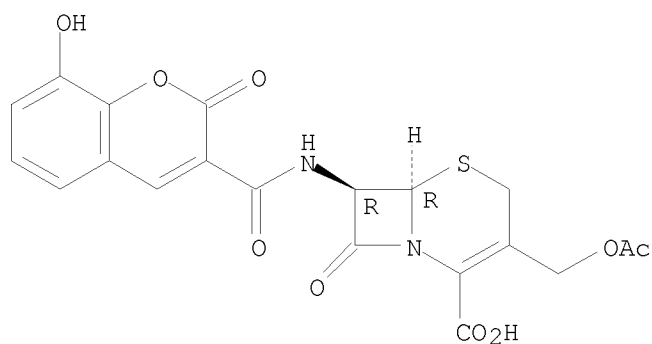
RN 107747-54-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[[(1-methyl-1H-  
tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 107747-55-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



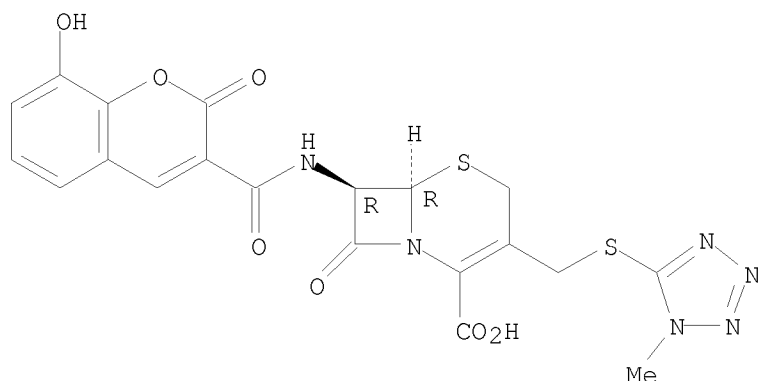
<12/04/2007>

Erich Leese

10/513699

RN 107747-57-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[[(1-methyl-1H-  
tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

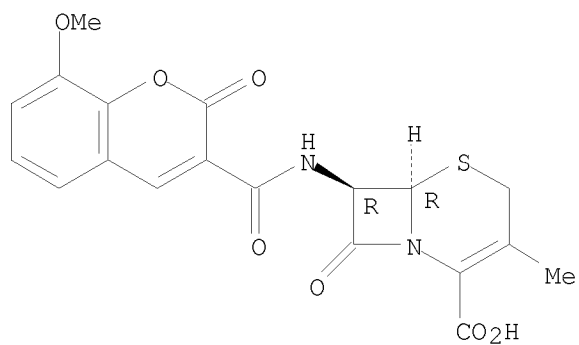
Absolute stereochemistry.



IT 62001-03-0P 107747-62-6P 107747-63-7P  
107747-64-8P 107747-65-9P 107747-66-0P  
108793-58-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 62001-03-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-8-oxo-,  
(6R-trans)- (9CI) (CA INDEX NAME)

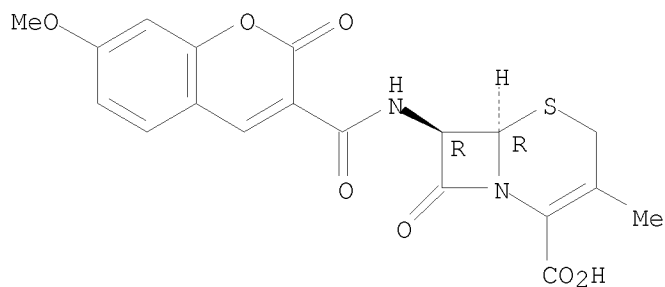
Absolute stereochemistry.



RN 107747-62-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-8-oxo-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

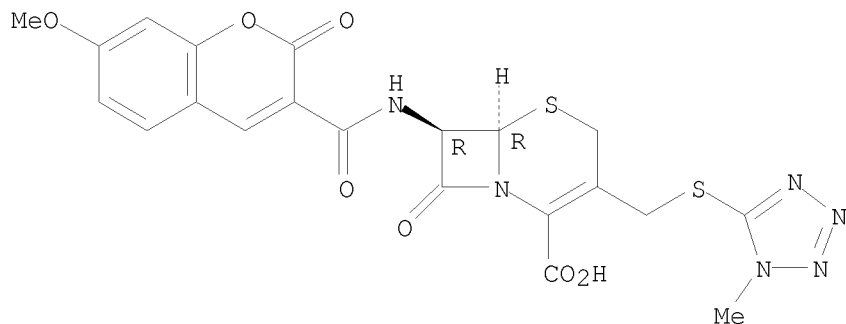
10/513699



RN 107747-63-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (1-methyl-1H-  
tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

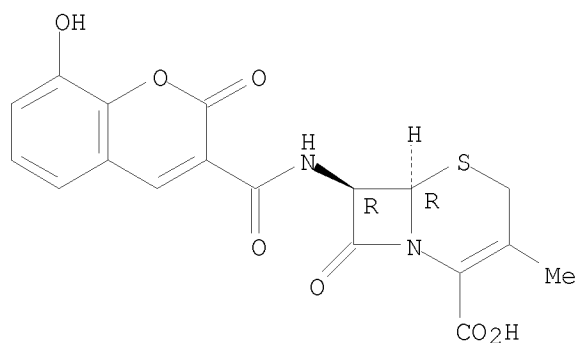
Absolute stereochemistry.



RN 107747-64-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-8-oxo-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



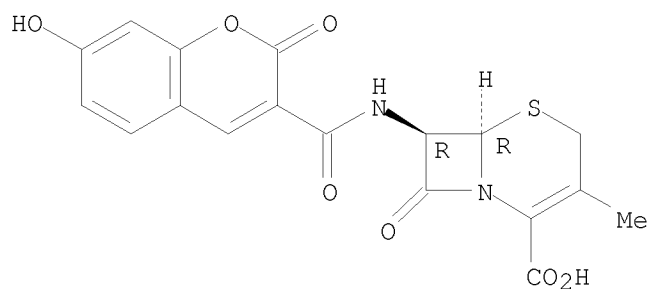
RN 107747-65-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-8-oxo-,

10/513699

(6R-trans)- (9CI) (CA INDEX NAME)

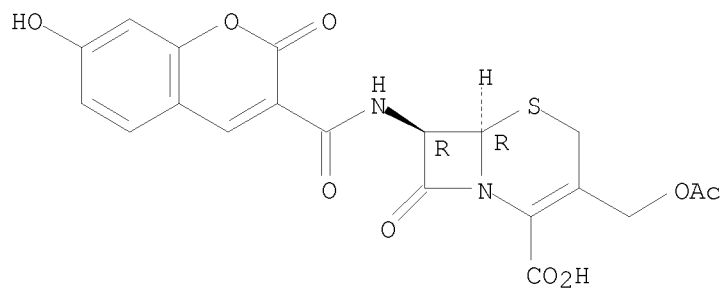
Absolute stereochemistry.



RN 107747-66-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

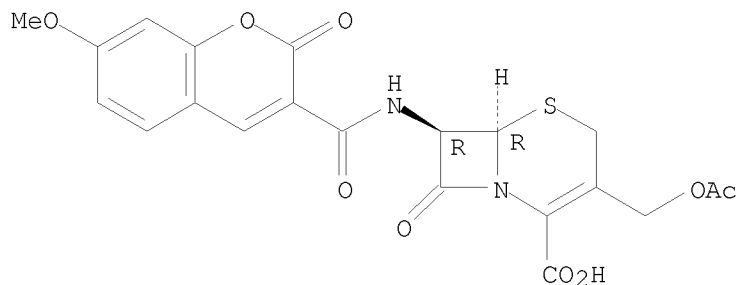
Absolute stereochemistry.



RN 108793-58-4 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

10/513699

<12/04/2007>

Erich Leese



L9 ANSWER 211 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1987:18243 CAPLUS

DOCUMENT NUMBER: 106:18243

ORIGINAL REFERENCE NO.: 106:3125a,3128a

TITLE: Haloacetamidocephems, intermediates for cephalosporins

INVENTOR(S): Sadaki, Hiroshi; Narita, Hirokazu; Imaizumi, Hiroyuki;  
Konishi, Yoshinori; Inaba, Takihiro; Hirakawa, Tatsuo

PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan

SOURCE: Patentschrift (Switz.), 44 pp.

CODEN: SWXXAS

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CH 651837	A5	19851015	CH 1984-4519	19810925 <--
JP 57058689	A	19820408	JP 1980-132253	19800925 <--
JP 62010512	B	19870306		
JP 57082393	A	19820522	JP 1980-158184	19801112 <--
JP 62010995	B	19870310		
JP 57099592	A	19820621	JP 1980-175263	19801213 <--
JP 60052755	B	19851121		
IL 63892	A	19860831	IL 1981-63892	19810920 <--
IL 74413	A	19860831	IL 1981-74413	19810920 <--
IL 74414	A	19860831	IL 1981-74414	19810920 <--
IL 74415	A	19860831	IL 1981-74415	19810920 <--
IL 76348	A	19860831	IL 1981-76348	19810920 <--
ZA 8106576	A	19820929	ZA 1981-6576	19810922 <--
PL 135446	B1	19851031	PL 1981-233143	19810923 <--
PL 135611	B1	19851130	PL 1981-238230	19810923 <--
PL 137674	B1	19860731	PL 1981-238228	19810923 <--
CS 236471	B2	19850515	CS 1981-7055	19810924 <--
SU 1190987	A3	19851107	SU 1981-3340952	19810924 <--
CH 652129	A5	19851031	CH 1981-6202	19810925 <--
CH 652130	A5	19851031	CH 1984-4520	19810925 <--
CH 652128	A5	19851031	CH 1984-4521	19810925 <--
FR 2511373	A1	19830218	FR 1982-15994	19820922 <--
FR 2511373	B1	19851213		
FR 2511374	A1	19830218	FR 1982-15995	19820922 <--
FR 2511374	B1	19850809		
FR 2533216	A1	19840323	FR 1982-15993	19820922 <--
FR 2533216	B1	19850329		
CS 236491	B2	19850515	CS 1982-7529	19821022 <--
CS 236492	B2	19850515	CS 1982-7530	19821022 <--
CS 236493	B2	19850515	CS 1982-7531	19821022 <--
SU 1249017	A1	19860807	SU 1982-3529508	19821209 <--
SU 1274625	A3	19861130	SU 1982-3523100	19821209 <--
SU 1308198	A3	19870430	SU 1982-3520352	19821209 <--
SU 1318144	A3	19870615	SU 1982-3521951	19821209 <--
SU 1418329	A1	19880823	SU 1982-3520351	19821209 <--
AT 8300556	A	19841115	AT 1983-556	19830218 <--
AT 378193	B	19850625		
AT 8300554	A	19850315	AT 1983-554	19830218 <--
AT 378961	B	19851025		
AT 8300555	A	19850315	AT 1983-555	19830218 <--

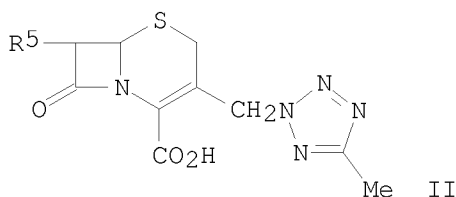
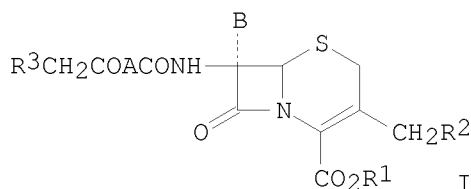
AT 378962	B	19851025		
SU 1350166	A1	19871107	SU 1983-3635254	19830824 <--
CA 1200541	A2	19860211	CA 1983-435930	19830901 <--
GB 2135304	A	19840830	GB 1984-2249	19840127 <--
GB 2135304	B	19850327		
GB 2136420	A	19840919	GB 1984-2250	19840127 <--
GB 2136420	B	19850501		
IN 158589	A1	19861213	IN 1984-CA601	19840829 <--
IN 158590	A1	19861213	IN 1984-CA602	19840829 <--
IN 159126	A1	19870328	IN 1984-CA603	19840829 <--
US 4673738	A	19870616	US 1984-654681	19840926 <--
AU 8549860	A	19860320	AU 1985-49860	19851113 <--
AU 558586	B2	19870205		
AU 8549863	A	19860320	AU 1985-49863	19851113 <--
AU 558669	B2	19870205		
FI 8700153	A	19870115	FI 1987-153	19870115 <--
FI 80041	B	19891229		
FI 80041	C	19900410		
US 4879381	A	19891107	US 1987-22433	19870306 <--
US 5144027	A	19920901	US 1991-707221	19910524 <--

PRIORITY APPLN. INFO.:

JP 1980-132253	A	19800925
JP 1980-158184	A	19801112
JP 1980-175263	A	19801213
CH 1981-6202	A	19810925
CA 1981-386066	A3	19810916
GB 1981-28011	A3	19810916
IN 1981-CA1045	A1	19810919
IL 1981-63892	A	19810920
US 1981-304912	A3	19810923
AT 1981-4109	A	19810924
CS 1981-7055	A3	19810924
FI 1981-2980	A	19810924
US 1984-654681	A3	19840926
IL 1985-74415	A	19850221
US 1987-22432	B3	19870306

OTHER SOURCE(S): CASREACT 106:18243

GI

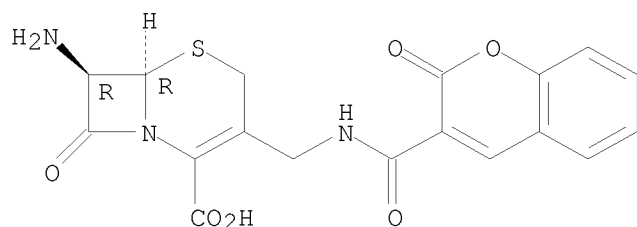


AB The title compds. [I; R1 = H, protecting group; R2 = (un)substituted acyl, acylamino, aromatic heterocyclyl; R3 = halo; A = CH2, syn- or anti-C(:NOR4); R4 = H, alkyl; B = H, alkoxy] were prepared as antibiotic intermediates. Thus, 7-aminocephalosporanic acid was treated with 5-methyltetrazole in sulfolone/BF3·Et2O to give tetrazolylcephem II (R5 = NH2) (III) along with the 1-tetrazolyl isomer. III was treated with diketene, CH2:C(OSiMe3)NHSiMe3, and HCl to give I (R1 = B = H, R2 =

10/513699

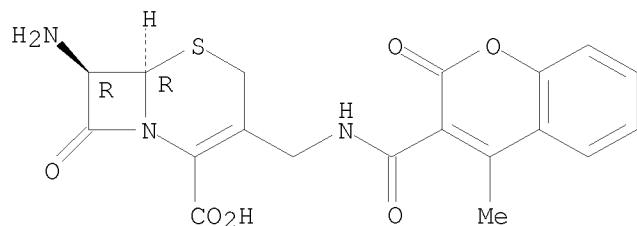
5-methyl-2-tetrazolyl, R3 = Cl, A = CH2). This was cyclocondensed with  
(H2N)2CS to give antibiotic II [R5 = 2-(2-amino-4-thiazolyl)acetamido].  
IT 80717-95-9P 80734-13-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and amidation of)  
RN 80717-95-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-8-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 80734-13-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-3-[[[(4-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-8-  
oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



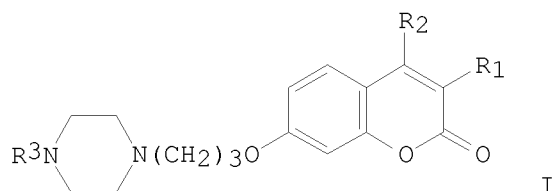
L9 ANSWER 212 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1986:224915 CAPLUS  
 DOCUMENT NUMBER: 104:224915  
 ORIGINAL REFERENCE NO.: 104:35683a,35686a  
 TITLE: 7-(Piperazinylpropoxy)-2H-1-benzopyran-2-ones  
 INVENTOR(S): Witte, Ernst Christian; Neubert, Peter; Roesch, Androniki  
 PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.  
 SOURCE: Ger. Offen., 25 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3427985	A1	19860130	DE 1984-3427985	19840728 <--
US 4670439	A	19870602	US 1985-755496	19850716 <--
EP 171645	A1	19860219	EP 1985-109016	19850719 <--
EP 171645	B1	19881130		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 38987	T	19881215	AT 1985-109016	19850719 <--
JP 61043183	A	19860301	JP 1985-166056	19850729 <--
PRIORITY APPLN. INFO.:			DE 1984-3427985	A 19840728
			EP 1985-109016	A 19850719

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 104:224915; MARPAT 104:224915

GI



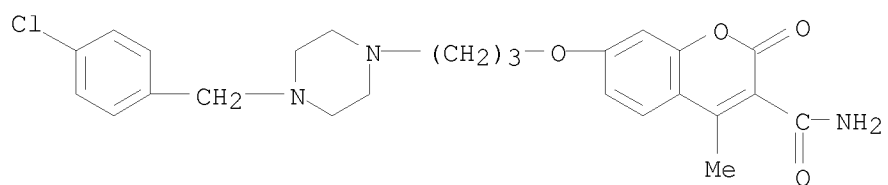
AB The title compds. [I; R1,R2 = CF3, cyano, acyl, CO2H, alkoxycarbonyl, aminocarbonyl, (un)substituted alkyl; R3 = (un)substituted Ph, PhCH2] were prepared as antiallergenics (no data). Thus, 2,4-(HO)2C6H3COCF3 was heated at 190° with (EtCO)2O/EtCO2Na to give 46% 7-hydroxy-3-methyl-4-(trifluoromethyl)-2H-1-benzopyran-2-one. This was alkylated with 3-[4-[(4-chlorophenyl)methyl]-1-piperazinyl]propyl chloride in MeCOEt containing K2CO3 and MeI to give 54% I (R1 = Me, R2 = CF3, R3 = 4-ClC6H4CH2).

IT 102392-30-3P 102392-46-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as antiallergic)

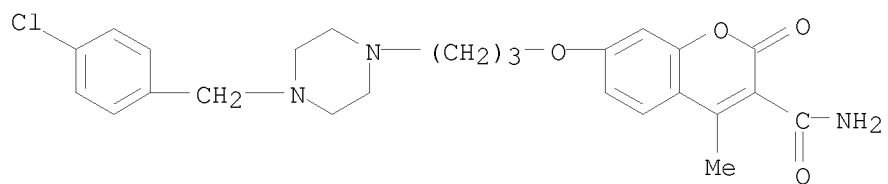
RN 102392-30-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-[3-[4-[(4-chlorophenyl)methyl]-1-piperazinyl]propoxy]-4-methyl-2-oxo- (CA INDEX NAME)

10/513699



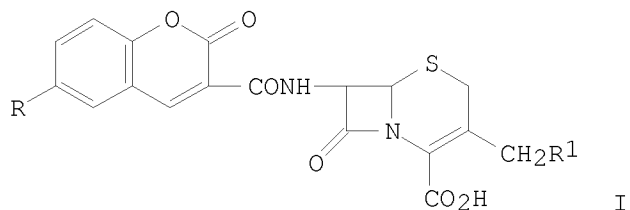
RN 102392-46-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-[3-[4-[(4-chlorophenyl)methyl]-1-piperazinyl]propoxy]-4-methyl-2-oxo-, hydrochloride (1:2) (CA INDEX NAME)



● 2 HCl

OS.CITING REF COUNT: 62 THERE ARE 62 CAPLUS RECORDS THAT CITE THIS RECORD (75 CITINGS)

L9 ANSWER 213 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1986:224755 CAPLUS  
 DOCUMENT NUMBER: 104:224755  
 ORIGINAL REFERENCE NO.: 104:35643a,35646a  
 TITLE: Synthesis of 7-(6-substituted-coumarin-3-formamido)cephalosporins  
 AUTHOR(S): Zhao, Zhicheng; Duan, Tinghan; Li, Minghua  
 CORPORATE SOURCE: Dep. Med. Chem., Nanjing Coll. Pharm., Nanjing, Peop. Rep. China  
 SOURCE: Nanjing Yaoxueyuan Xuebao (1985), 16(4), 8-11, 1 plate  
 CODEN: NYXUDF; ISSN: 0254-5055  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI



AB The title compds. I [R = H, Br, Cl, NO<sub>2</sub>, OMe; R<sub>1</sub> = H, OAc, (1-methyltetrazolyl)thio] were prepared by reactions of substituted coumarincarbonyl chlorides with corresponding 7-aminocephalosporic acids. Antibacterial tests showed that most of I possessed activity against Gram-pos., but not against Gram-neg. bacteria.

IT 102330-31-4P 102330-32-5P 102330-33-6P  
 102330-34-7P 102330-36-9P 102330-37-0P  
 102330-38-1P 102330-39-2P 102330-41-6P  
 102330-42-7P 102330-43-8P 102330-44-9P

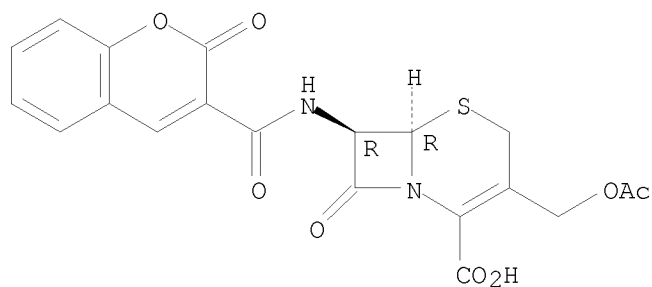
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and antibacterial activity of)

RN 102330-31-4 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 3-[(acetyloxy)methyl]-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

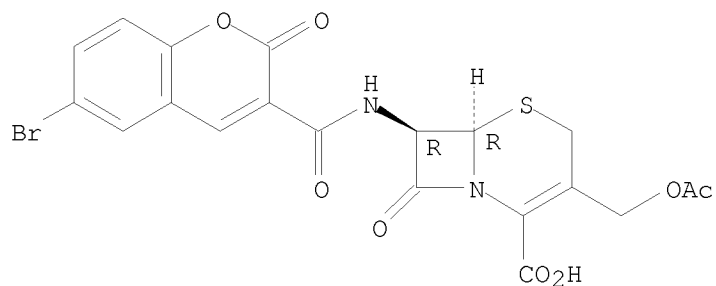
10/513699



RN 102330-32-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

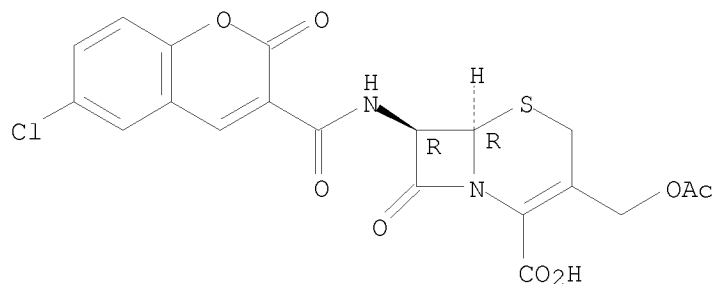
Absolute stereochemistry.



RN 102330-33-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R,7R)- (CA INDEX NAME)

Absolute stereochemistry.

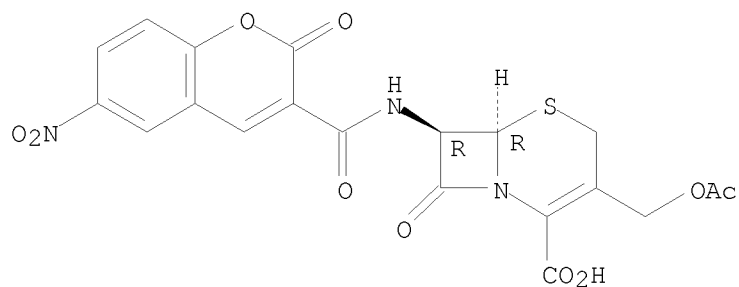


RN 102330-34-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[ (6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

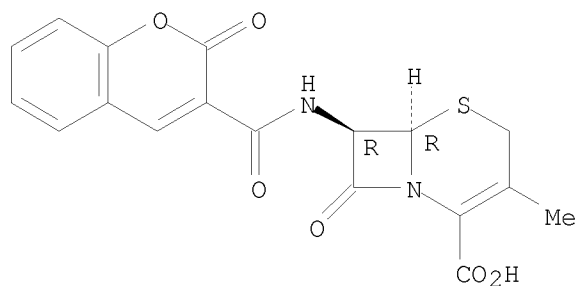
Absolute stereochemistry.

10/513699



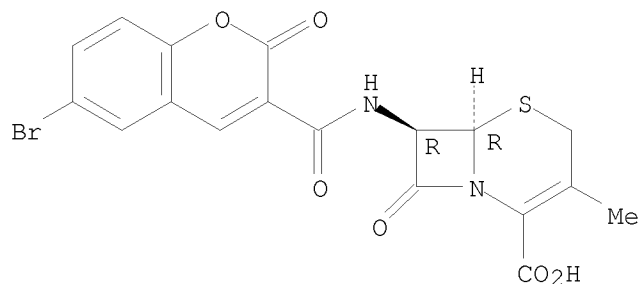
RN 102330-36-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-methyl-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 102330-37-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-3-methyl-8-oxo-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

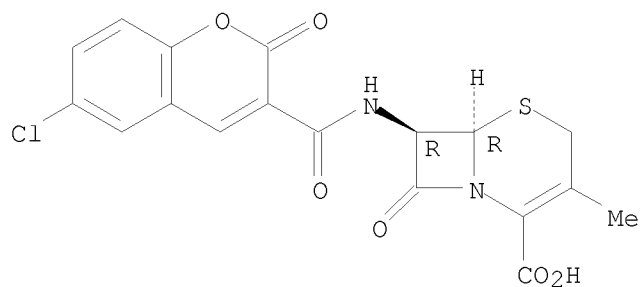


RN 102330-38-1 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-chloro-2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]-3-methyl-8-oxo-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

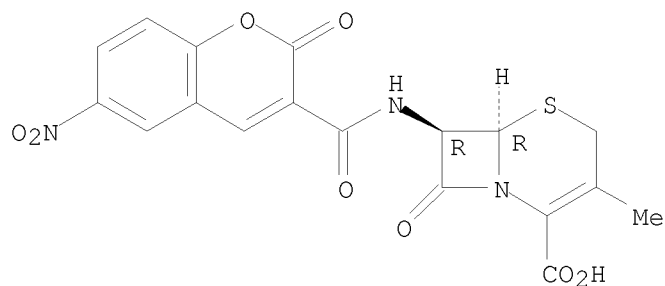


10/513699



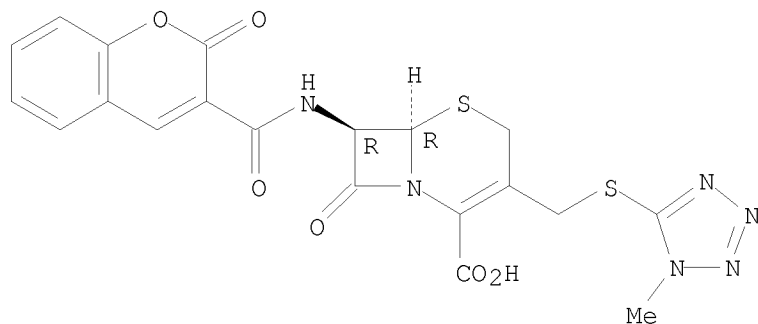
RN 102330-39-2 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-methyl-7-[[ (6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 102330-41-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[ (1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-7-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (6R-trans)- (9CI) (CA INDEX NAME)

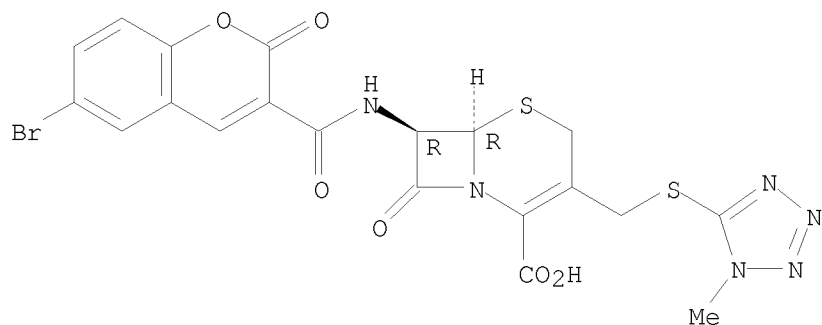
Absolute stereochemistry.



RN 102330-42-7 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[ (1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

10/513699

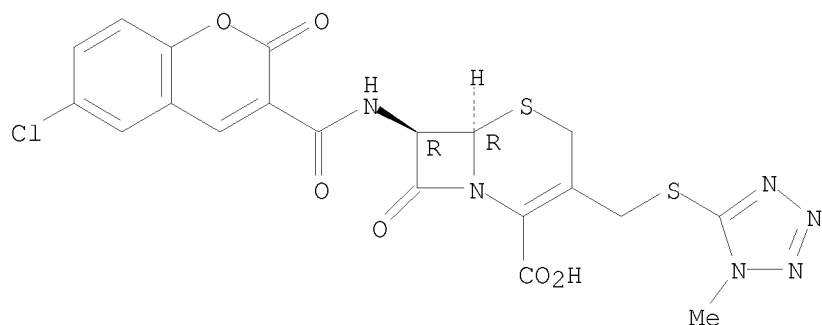
Absolute stereochemistry.



RN 102330-43-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

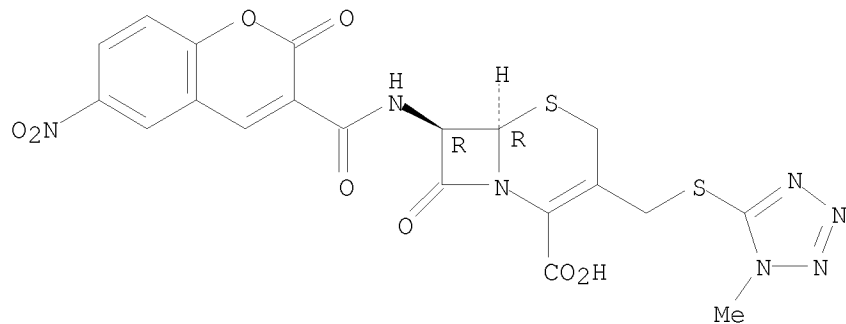
Absolute stereochemistry.



RN 102330-44-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-7-[[[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-8-oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

10/513699

<12/04/2007>

Erich Leese

L9 ANSWER 214 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1986:168825 CAPLUS  
 DOCUMENT NUMBER: 104:168825  
 ORIGINAL REFERENCE NO.: 104:26767a,26770a  
 TITLE: Glutamic acid diamide derivatives and their use as  
 antiulcer agents  
 PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd. , Japan  
 SOURCE: Belg., 77 pp.  
 CODEN: BEXXAL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

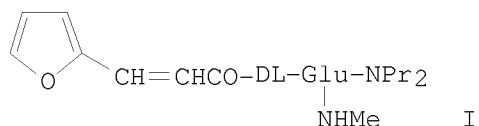
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 901229	A1	19850606	BE 1984-214130	19841206 <--
JP 61001651	A	19860107	JP 1984-120584	19840612 <--
JP 04066230	B	19921022		
DK 8405636	A	19851213	DK 1984-5636	19841128 <--
DK 168005	B1	19940117		
GB 2160197	A	19851218	GB 1984-30081	19841128 <--
GB 2160197	B	19880217		
CA 1265801	A1	19900213	CA 1984-468866	19841128 <--
DE 3444046	A1	19851212	DE 1984-3444046	19841203 <--
DE 3444046	C2	19901129		
US 4610983	A	19860909	US 1984-677466	19841203 <--
SE 8406141	A	19851213	SE 1984-6141	19841204 <--
SE 456161	B	19880912		
FR 2565587	A1	19851213	FR 1984-18609	19841206 <--
FR 2565587	B1	19890317		
NL 8403716	A	19860102	NL 1984-3716	19841206 <--
NL 193022	B	19980401		
NL 193022	C	19980804		
CH 663019	A5	19871113	CH 1984-5803	19841206 <--
FI 8404852	A	19851213	FI 1984-4852	19841207 <--
FI 81563	B	19900731		
FI 81563	C	19901112		
AU 8436398	A	19851219	AU 1984-36398	19841207 <--
AU 556097	B2	19861023		

PRIORITY APPLN. INFO.: JP 1984-120584 A 19840612

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 104:168825; MARPAT 104:168825

GI



AB Amino acid diamides R1R2NCO(CH2)nCH(NHCOZ1R5)CONR3R4 (R1, R2, R3, and R4 = H, alkyl, cycloalkyl, alkenyl, aralkyl; NR1R2 or NR3R4 form a heterocycle; n = 1, 2, 3; Z1 = direct bond, alkylene, alkadienylene; R5 = cycloalkyl, acyl, heterocyclic group) were prepared and they showed anti-ulcer activity.

10/513699

Thus, H-DL-Glu(NHMe)-NPr<sub>2</sub>.HCl was condensed with 3-(2-furyl)acrylic acid by ClCO<sub>2</sub>Et in the presence of Et<sub>3</sub>N to give DL-glutamic acid diamide I.

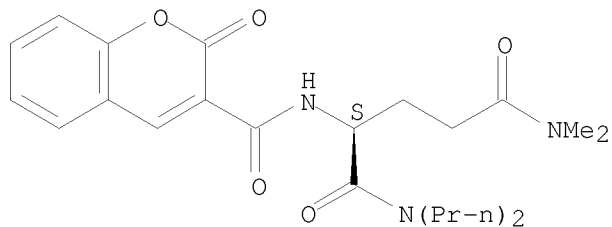
IT 96785-27-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as anti-ulcer agent)

RN 96785-27-2 CAPLUS

CN Pentanediamide, N5,N5-dimethyl-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-N1,N1-dipropyl-, (S)- (9CI) (CA INDEX NAME)

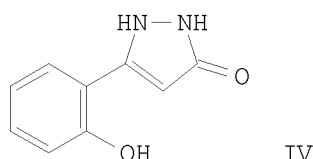
Absolute stereochemistry.



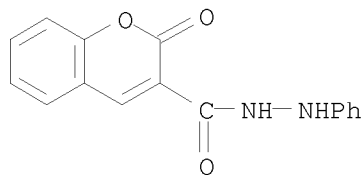
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(9 CITINGS)

10/513699

L9 ANSWER 215 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1986:129749 CAPLUS  
DOCUMENT NUMBER: 104:129749  
ORIGINAL REFERENCE NO.: 104:20525a,20528a  
TITLE: Reactions of some coumarins with hydrazine and  
phenylhydrazine  
AUTHOR(S): Soliman, F. S. G.; Labouta, I. M.; Stadlbauer, W.  
CORPORATE SOURCE: Fac. Pharm., Univ. Alexandria, Alexandria, Egypt  
SOURCE: Archiv for Pharmaci og Chemi, Scientific Edition ( 1985), 13(2), 49-52  
CODEN: AVPCCS; ISSN: 0302-248X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



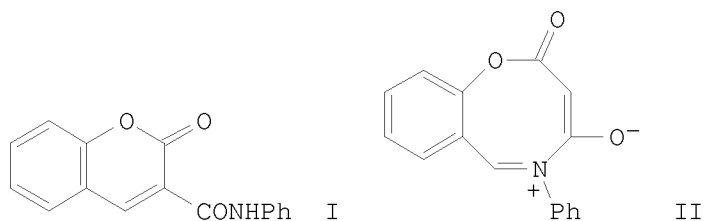
AB Treating Et coumarin-3-carboxylate (I), coumarin-3-carboxylic acid (II), or 3-cyano-2-iminocoumarin (III) with  $\text{NH}_2\text{NH}_2$  in refluxing EtOH gave salicylaldehyde azine. Treating I with  $\text{PhNHNH}_2$  in EtOH gave coumarin-3-carboxylic acid phenylhydrazide and salicylaldehyde phenylhydrazone. The last was also obtained by treating II with  $\text{PhNHNH}_2$ . Treating III with  $\text{PhNHNH}_2$  gave the same salicylaldehyde phenylhydrazone. On the other hand, treating 4-hydroxycoumarin with  $\text{NH}_2\text{NH}_2$  gave the pyrazole derivative IV.  
IT 1846-92-0P  
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
RN 1846-92-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX NAME)



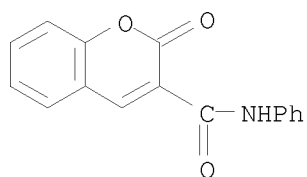
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

10/513699

L9 ANSWER 216 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1986:129747 CAPLUS  
DOCUMENT NUMBER: 104:129747  
ORIGINAL REFERENCE NO.: 104:20525a,20528a  
TITLE: The reaction between an azomethine and malonyl  
dichloride  
AUTHOR(S): Sard, Howard; Meltzer, Peter C.; Razdan, Raj K.  
CORPORATE SOURCE: SISA Pharm. Lab. Inc., Cambridge, MA, 02138, USA  
SOURCE: Journal of Heterocyclic Chemistry (1985),  
22(2), 257  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 104:129747  
GI



AB Treating 2-HOC<sub>6</sub>H<sub>4</sub>CH:NPh with CH<sub>2</sub>(COCl)<sub>2</sub> gave 37% coumarin I, not the  
reported benzoxazocine II (Bonsignore, L.; et al, 1982).  
IT 54396-25-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, from hydroxybenzylidenamine and malonyl dichloride, vs.  
benzoxazocinone)  
RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



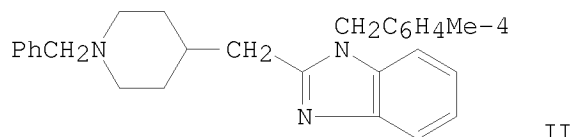
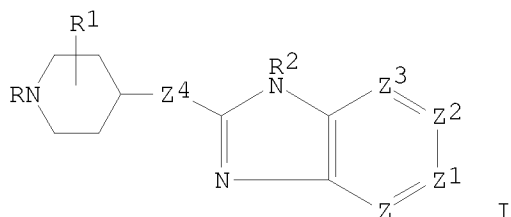
10/513699

L9 ANSWER 217 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1986:68861 CAPLUS  
DOCUMENT NUMBER: 104:68861  
ORIGINAL REFERENCE NO.: 104:11025a,11028a  
TITLE: (Piperidinylmethyl)- and  
(piperidinylloxy)benzimidazoles and -imidazopyridines  
INVENTOR(S): Janssens, Frans Eduard; Kennis, Ludo Edmond Josephine;  
Hens, Jozef Francis; Torremans, Joseph Leo G.; Diels,  
Gaston Stanislas M.  
PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.  
SOURCE: Eur. Pat. Appl., 140 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 151826	A1	19850821	EP 1984-201851	19841213 <--
EP 151826	B1	19930331		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 87626	T	19930415	AT 1984-201851	19841213 <--
AU 8537364	A	19850912	AU 1985-37364	19850107 <--
AU 573673	B2	19880616		
CA 1259609	A1	19890919	CA 1985-471589	19850107 <--
DK 8500089	A	19850710	DK 1985-89	19850108 <--
FI 8500079	A	19850710	FI 1985-79	19850108 <--
FI 83867	B	19910531		
FI 83867	C	19910910		
NO 8500085	A	19850710	NO 1985-85	19850108 <--
NO 160849	B	19890227		
NO 160849	C	19890607		
JP 60185777	A	19850921	JP 1985-479	19850108 <--
JP 07068240	B	19950726		
HU 36471	A2	19850930	HU 1985-61	19850108 <--
HU 200338	B	19900528		
ZA 8500187	A	19860827	ZA 1985-187	19850108 <--
RO 90622	B3	19861210	RO 1985-117252	19850108 <--
SU 1396964	A3	19880515	SU 1985-3836858	19850108 <--
IL 74018	A	19880831	IL 1985-74018	19850108 <--
PL 145710	B1	19881031	PL 1985-251488	19850109 <--
PRIORITY APPLN. INFO.:			US 1984-569369	A 19840109
			US 1984-671135	A 19841113
			EP 1984-201851	A 19841213

GI





AB The title compds. I (Z-Z3 = CH, or one of Z-Z3 is N and the remainder are CH; Z4 = CH2, O, S, SO, SO2; R = alkyl, aryl-, heteroaryl-, acyl-, hydroxy-, aryloxy, heteroaryloxy-, alkoxy-, arylthio-, carbonyl-, carboalkoxy-, cyano-, amino-, ureido-, thioureido-, or guanidinoalkyl, cycloalkyl, alkenyl, arylalkenyl; R1 = H, alkyl; R2 = H, alkyl, cycloalkyl, aryl, heteroaryl, aryl- or heteroarylalkyl), which were prepared, exhibited antihistaminic activity. Thus, a mixture of 2-(4-MeC6H4CH2NH)C6H4NH2 and Et 1-benzyl-4-piperidineacetimidate hydrochloride in MeOH was refluxed and NH3 was added to give benzimidazole II.

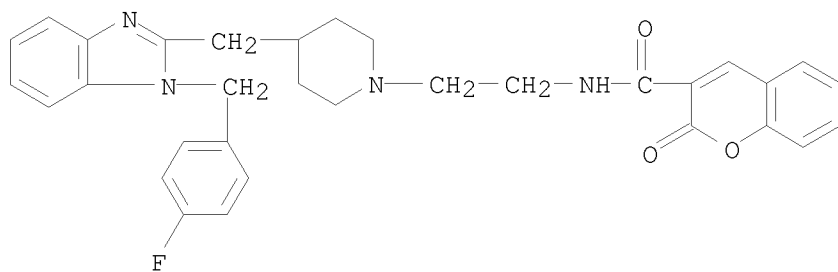
IT 99962-57-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antihistaminic activity of)

RN 99962-57-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-[[1-[(4-fluorophenyl)methyl]-1H-benzimidazol-2-yl]methyl]-1-piperidinyl]ethyl]-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (28 CITINGS)

L9 ANSWER 218 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1986:50874 CAPLUS  
 DOCUMENT NUMBER: 104:50874  
 ORIGINAL REFERENCE NO.: 104:8217a,8220a  
 TITLE: N-(4-Piperidiny1) bicyclic condensed 2-imidazolamine derivatives  
 INVENTOR(S): Janssens, Frans Eduard; Torremans, Joseph Leo  
 Ghislanus; Hens, Jozef Francis; Van Offenwert, Theophilus Theresia Joannes  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.  
 SOURCE: Eur. Pat. Appl., 68 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 151824	A2	19850821	EP 1984-201812	19841206 <--
EP 151824	A3	19851009		
EP 151824	B1	19900404		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4588722	A	19860513	US 1984-660670	19841015 <--
CA 1246070	A1	19881206	CA 1984-469245	19841204 <--
AT 51621	T	19900415	AT 1984-201812	19841206 <--
AU 8537363	A	19850801	AU 1985-37363	19850107 <--
AU 575612	B2	19880804		
JP 60174778	A	19850909	JP 1985-251	19850107 <--
RO 91075	B3	19870227	RO 1985-117231	19850107 <--
PL 144514	B1	19880630	PL 1985-251476	19850107 <--
DK 8500088	A	19850710	DK 1985-88	19850108 <--
FI 8500078	A	19850710	FI 1985-78	19850108 <--
FI 83781	B	19910515		
FI 83781	C	19910826		
NO 8500084	A	19850710	NO 1985-84	19850108 <--
HU 37780	A2	19860228	HU 1985-62	19850108 <--
HU 196389	B	19881128		
ZA 8500186	A	19860827	ZA 1985-186	19850108 <--
IL 74017	A	19880331	IL 1985-74017	19850108 <--
SU 1400509	A3	19880530	SU 1985-3838812	19851008 <--
NO 8902563	A	19850710	NO 1989-2563	19890621 <--
PRIORITY APPLN. INFO.:			US 1984-569115	A 19840109
			US 1984-660670	A 19841015
			EP 1984-201812	A 19841206
			NO 1985-84	A1 19850108

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 104:50874; MARPAT 104:50874

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; A = (un)substituted C6H6 or pyridine ring; R = H, alkyl; R1 = H, alkyl, cycloalkyl, aralkyl, (alkyl)furanyl, (alkyl)imidazolyl, (halo)thienyl, pyridinyl, pyrazinyl, thiazolyl, (un)substituted Ph; R2 = H, alkyl, cycloalkyl, aralkyl, alkanoyl, alkoxy carbonyl; R3 = R4Z, (un)substituted saturated heterocyclyl; R4 = acyl, acylamino, acyloxy, acylthio, (un)substituted Ph, aryl, etc.; Z = alkylene] were prepared. Thus 3-chloro-2-nitropyridine was aminolyzed with 4-FC6H4CH2NH2 and the product hydrogenated to give

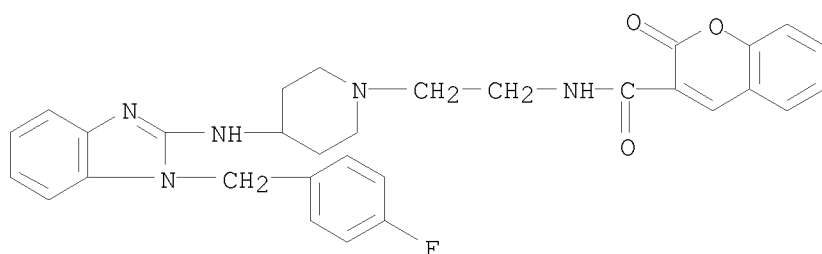
N3-[(4-fluorophenyl)methyl]-2,3-pyridinediamine. This was condensed with Et 4-isothiocyanatopiperidinecarboxylate to give pyridinylthiourea derivative II which was cyclized by heating in EtOH with HgO and S to give imidazopyridinamine III (R5 = CO2Et). The latter was decarboxylated by heating in 48% aqueous HBr to give III.2HBr (R5 = H) which was alkylated with a p-methoxyphenethyl halide to give III (R5 = 4-MeOC6H4CH2CH2) (IV). I are antihistaminics. In mice IV inhibited compound 48/80-induced lethality with an ED50 of 0.08 mg/kg s.c. or orally.

IT 99780-40-2P 99780-41-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as antihistaminic)

RN 99780-40-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-[[1-[(4-fluorophenyl)methyl]-1H-benzimidazol-2-yl]amino]-1-piperidinyl]ethyl]-2-oxo- (CA INDEX NAME)



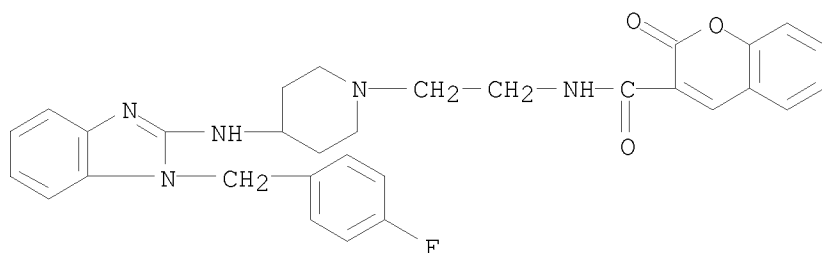
RN 99780-41-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[4-[[1-[(4-fluorophenyl)methyl]-1H-benzimidazol-2-yl]amino]-1-piperidinyl]ethyl]-2-oxo-, (2E)-2-butenedioate (1:2) (CA INDEX NAME)

CM 1

CRN 99780-40-2

CMF C31 H30 F N5 O3



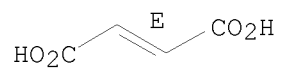
CM 2

CRN 110-17-8

CMF C4 H4 O4

10/513699

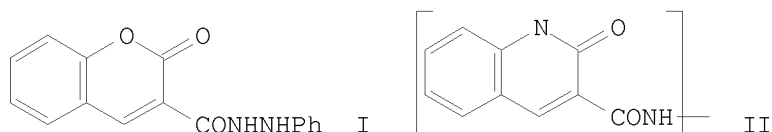
Double bond geometry as shown.



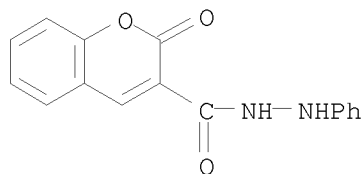
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(8 CITINGS)

10/513699

L9 ANSWER 219 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1985:615120 CAPLUS  
DOCUMENT NUMBER: 103:215120  
ORIGINAL REFERENCE NO.: 103:34667a,34670a  
TITLE: Novel reactions of carbon suboxide. VI. Synthesis of  
2-oxo-1-benzopyran- and 2-oxoquinoline-3-carboxylic  
acid hydrazides  
AUTHOR(S): Bonsignore, Leonardo; Cabiddu, Salvatore; Loy,  
Giuseppe; Secci, Mario  
CORPORATE SOURCE: Ist. Chim. Farm. Tossicol., Univ. Cagliari, Cagliari,  
09100, Italy  
SOURCE: Journal of Heterocyclic Chemistry (1985),  
22(2), 463-4  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 103:215120  
GI

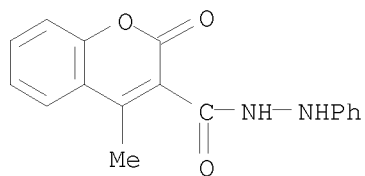


AB A simple, one step synthesis of 2-oxo-1-benzopyran and  
2-oxoquinoline-3-carboxylic acid hydrazides from carbon suboxide and  
hydrazones is described. Thus, treatment of 2-HOC<sub>6</sub>H<sub>4</sub>CH:NNHPh with C<sub>3</sub>O<sub>2</sub> in  
Et<sub>2</sub>O at 0° for 8 h gave 67% hydrazide I. Condensation of  
(2-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH:N)<sub>2</sub> with C<sub>3</sub>O<sub>2</sub> in PhMe-C<sub>6</sub>H<sub>6</sub> at 0° for 4 h gave the  
bis[quinolinone]II.  
IT 1846-92-0P 99275-33-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and hydrolysis of)  
RN 1846-92-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX  
NAME)

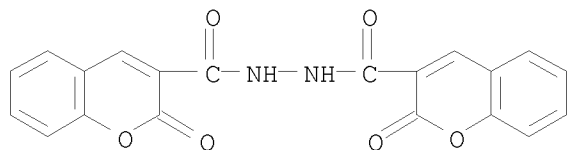


RN 99275-33-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 4-methyl-2-oxo-, 2-phenylhydrazide (CA  
INDEX NAME)

10/513699



IT 99275-34-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 99275-34-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

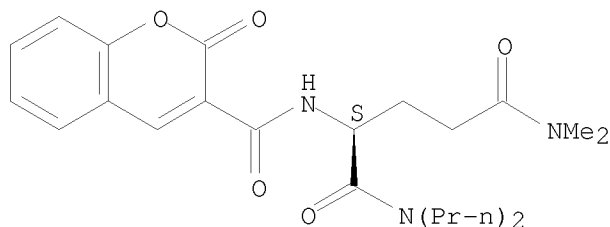
10/513699

L9 ANSWER 220 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1985:422927 CAPLUS  
DOCUMENT NUMBER: 103:22927  
ORIGINAL REFERENCE NO.: 103:3803a,3806a  
TITLE: N-Acyl acidic amino acid diamides  
PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

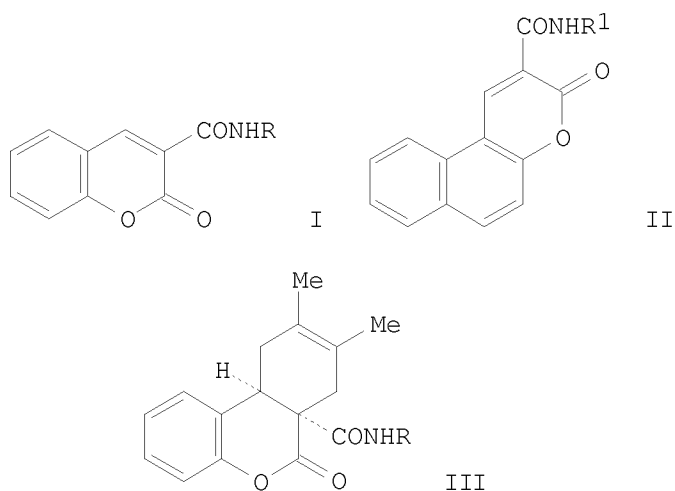
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59227847	A	19841221	JP 1983-101711	19830609 <--
JP 04060983	B	19920929		

PRIORITY APPLN. INFO.: JP 1983-101711 19830609  
OTHER SOURCE(S): CASREACT 103:22927  
AB One hundred title compds.  $RR_1NCO(CH_2)_nCH(CONR_2R_3)NHCOZR_4$  [I; R,  $R_1$ ,  $R_2$ ,  $R_3$  = H, (un)substituted alkyl;  $RR_1N$  or  $R_2R_3N$  may form a heterocyclic ring; Z = bond, alkylene, alkenylene, alkadienylene; n = 1-3] were prepared by, e.g., reaction of  $RR_1NCO(CH_2)_nCH(CONR_2R_3)NH_2$  (II) with  $R_4ZCO_2H$  (III) or their  $CO_2H$  reactive derivs. Anti-ulceric activity data of I were shown to be more potent than proglumide. Thus, 3 g DL-II.HCl (R = Me,  $R_1$  = H,  $R_2$  =  $R_3$  = Pr, n = 2) was added to a mixture of III ( $R_4$  = furyl, Z = CH:CH) 1.5, Et<sub>3</sub>N 2.7, and ClCO<sub>2</sub>Et 1.3 g in CH<sub>2</sub>Cl<sub>2</sub> at -25° to -20° to give, after 1 h, 80% DL-I (R = Me,  $R_1$  = H,  $R_2$  =  $R_3$  = Pr, n = 2,  $R_4$  = furyl, Z = CH:CH).  
IT 96785-27-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 96785-27-2 CAPLUS  
CN Pentanediamide, N5,N5-dimethyl-2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-N1,N1-dipropyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 221 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1985:422418 CAPLUS  
 DOCUMENT NUMBER: 103:22418  
 ORIGINAL REFERENCE NO.: 103:3691a,3694a  
 TITLE: Synthesis and novel [4 + 2] cycloaddition reactions of coumarin derivatives  
 AUTHOR(S): Gotthardt, Hans; Hoffmann, Norbert  
 CORPORATE SOURCE: Gesamthochsch. Wuppertal, Bergische Univ., Wuppertal, D-5600/1, Fed. Rep. Ger.  
 SOURCE: Liebigs Annalen der Chemie (1985), (5), 901-12  
 CODEN: LACHDL; ISSN: 0170-2041  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 103:22418  
 GI



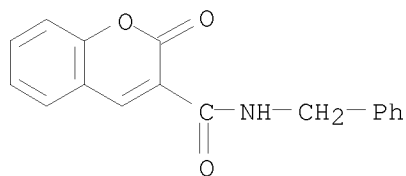
AB Coumarin derivs. I (R = Me, PhCH<sub>2</sub>, aryl) and II (R<sub>1</sub> = PhCH<sub>2</sub>NH, substituted anilino, 2,4,6-Cl<sub>3</sub>C<sub>6</sub>H<sub>2</sub>O) were prepared from corresponding azomethines (e.g., o-HOC<sub>6</sub>H<sub>4</sub>CH:NR). The I and II underwent cycloaddn. reactions with 2,3-dimethyl-1,3-butadiene and 1,2-bis(methylene)cyclohexane to give polycyclic compds. such as III.

IT 1846-90-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cycloaddn. reaction of, with dimethylbutadiene)

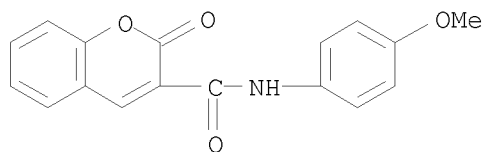
RN 1846-90-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



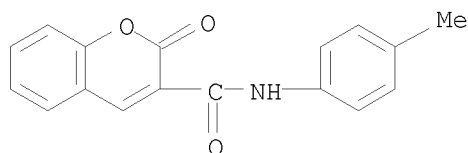
10/513699



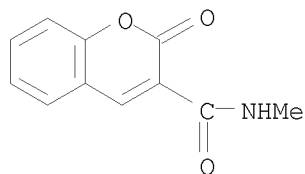
IT 1846-94-2P 1847-00-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and cycloaddn. reactions of)  
RN 1846-94-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 1847-00-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



IT 1846-79-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 1846-79-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-methyl-2-oxo- (CA INDEX NAME)

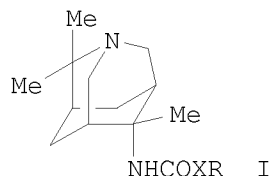


OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

10/513699

L9 ANSWER 222 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1985:131937 CAPLUS  
DOCUMENT NUMBER: 102:131937  
ORIGINAL REFERENCE NO.: 102:20703a,20706a  
TITLE: 4-Acylamino-1-azaadamantanes and their therapeutic use  
INVENTOR(S): Jarreau, Francois Xavier; Koenig, Jean Jacques  
PATENT ASSIGNEE(S): Etablissements Nativelle S. A., Fr.  
SOURCE: Fr. Demande, 23 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
FR 2543954	A1	19841012	FR 1983-5764	19830408 <--
FR 2543954	B1	19850906		
PRIORITY APPLN. INFO.:			FR 1983-5764	19830408
OTHER SOURCE(S):	CASREACT 102:131937; MARPAT 102:131937			
GI				

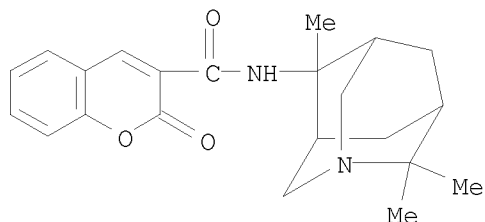


AB The title compds. I [R = (un)substituted Ph, pyridyl, naphthyl, tetrahydronaphthyl, coumarinyl; X = bond, C1-3 saturated or unsatd divalent aliphatic group] were prepared for treatment of cardiovascular disease. Thus, 4-amino-4,8,8-trimethyl-1-azaadamantane was condensed with p-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H by DCC/N-hydroxysuccinimide in CH<sub>2</sub>Cl<sub>2</sub> to give 85% I (RX = p-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>) (II). The antiarrhythmic ED<sub>50</sub> of II in the Lawson test was 80 mg/kg.

IT 95413-82-4P 95413-83-5P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 95413-82-4 CAPLUS

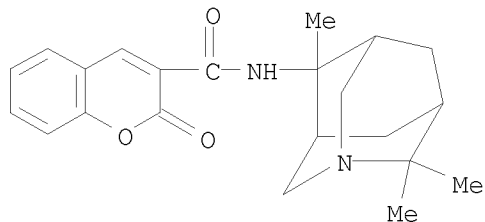
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(4,8,8-trimethyl-1-azatricyclo[3.3.1.1<sup>3,7</sup>]dec-4-yl)- (CA INDEX NAME)



10/513699

RN 95413-83-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(4,8,8-trimethyl-1-azatricyclo[3.3.1.1<sup>3,7</sup>]dec-4-yl)-, hydrochloride (1:1) (CA INDEX NAME)

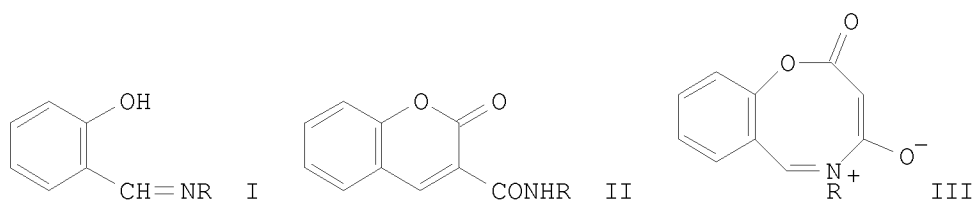


● HCl

OS.CITING REF COUNT:	2	THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

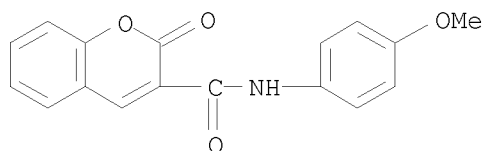
L9 ANSWER 223 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1985:62034 CAPLUS  
DOCUMENT NUMBER: 102:62034  
ORIGINAL REFERENCE NO.: 102:9725a,9728a  
TITLE: Reactions of azomethines and carbon suboxide  
AUTHOR(S): Bonsignore, Leonardo; Cabiddu, Salvatore; Loy,  
Giuseppe; Secci, Mario  
CORPORATE SOURCE: Ist. Chim. Farm. Tossicol., Univ. Cagliari, Cagliari,  
09100, Italy  
SOURCE: Heterocycles (1984), 22(11), 2587-90  
CODEN: HTCYAM; ISSN: 0385-5414  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



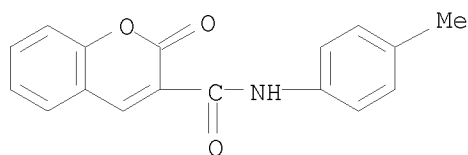
AB Salicylaldehyde anils I (R = Ph, tolyl, anisyl) were treated with C3O2 in the absence of acid to yield coumarincarboxanilides II and some 1,5-benzoxazocines III. Thus, I (R = Ph) was treated with C3O2 in Et2O at 0° and then at room temperature to give 65% II (R = Ph) and 12% III (R = Ph).

IT 1846-94-2P 1847-00-3P 54396-25-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 1846-94-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



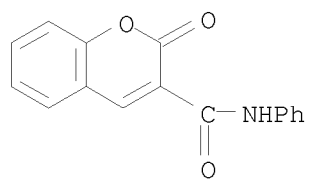
RN 1847-00-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



10/513699

RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 224 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1985:20796 CAPLUS  
 DOCUMENT NUMBER: 102:20796  
 ORIGINAL REFERENCE NO.: 102:3397a,3400a  
 TITLE: Optical indicator chalcogen compounds  
 INVENTOR(S): Buckler, Robert T.; Hatch, Robert P.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: Eur. Pat. Appl., 44 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 121743	A2	19841017	EP 1984-102280	19840302 <--
EP 121743	A3	19850911		
EP 121743	B1	19870909		
R: CH, DE, FR, GB, IT, LI, NL, SE				
CA 1294285	C	19920114	CA 1984-446312	19840130 <--
IL 70836	A	19871020	IL 1984-70836	19840131 <--
AU 550716	B1	19860410	AU 1984-24879	19840223 <--
JP 59175468	A	19841004	JP 1984-45722	19840312 <--
JP 04009785	B	19920221		
US 4778893	A	19881018	US 1987-540	19870105 <--
US 4996332	A	19910226	US 1988-205732	19880613 <--
PRIORITY APPLN. INFO.:			US 1983-475200	A 19830314
			US 1984-670004	A1 19841113
			US 1987-540	A3 19870105

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 102:20796; MARPAT 102:20796

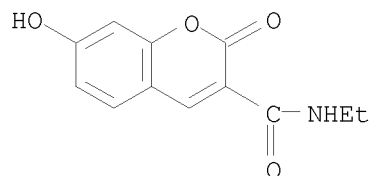
AB Optical indicator chalcogen (selenide or sulfide) compds. responsive to oxidants, e.g., H2O2, and methods for preparing and using such indicators are described. Upon oxidation, the resulting intermediate undergoes spontaneous elimination of the chalcogen residue to yield a signal compound that provides an optical signal such as fluorescence. Preferred fluorogenic indicator compds. are 3-chalcogen-3,4-dihydrocoumarin derivs. and 3-chalcogen-3,4-dihydro-2-quinolone derivs., e.g., 7-hydroxy-3-phenylselenyl-3,4-dihydrocoumarin and 7-hydroxy-3-(N-ethylcarboxamido)-3-phenylselenyl-N-methyl-3,4-dihydro-2-quinolone, resp. Such indicator compds. provide highly fluorescent products upon oxidation by H2O2 and are useful in anal. systems that generate H2O2 in response to the analyte to be determined. Thus, 7-hydroxy-3-phenylselenyl-3,4-dihydrocoumarin was prepared by reaction of 7-hydroxy-3,4-dihydrocoumarin with tert-butyldimethylsilyl chloride to form the silyl ether which was then treated with phenylselenyl chloride to form the desired compound

IT 93835-96-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction with dihydropyran)

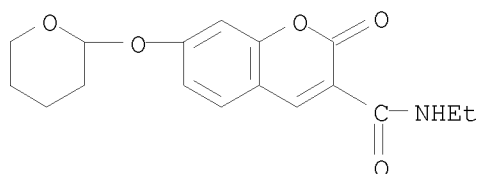
RN 93835-96-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-ethyl-7-hydroxy-2-oxo- (CA INDEX NAME)

10/513699



IT 93835-97-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reduction of)  
RN 93835-97-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-ethyl-2-oxo-7-[(tetrahydro-2H-pyran-2-  
yl)oxy]- (CA INDEX NAME)



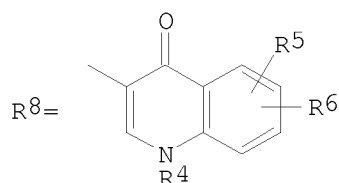
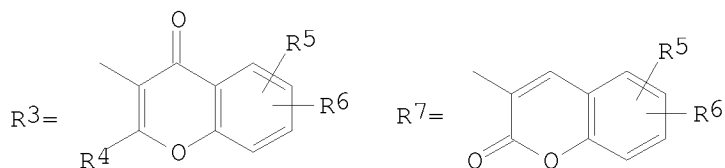
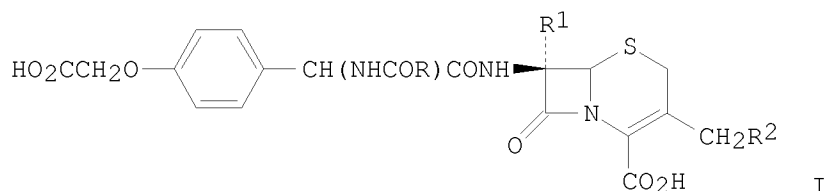
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 225 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1984:630234 CAPLUS  
DOCUMENT NUMBER: 101:230234  
ORIGINAL REFERENCE NO.: 101:34953a,34956a  
TITLE: 7-Carboxymethoxyphenylacetamido-3-cephem derivatives  
and antibacterial drugs containing them  
INVENTOR(S): Machida, Yoshimasa; Negi, Shigeto; Nomoto, Seiichiro;  
Kamiya, Takashi; Kitoh, Kyosuke; Saito, Isao  
PATENT ASSIGNEE(S): Eisai Co., Ltd. , Japan  
SOURCE: Ger. Offen., 157 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 3345093	A1	19840614	DE 1983-3345093	19831213 <--
JP 59108791	A	19840623	JP 1982-217726	19821214 <--
JP 59161389	A	19840912	JP 1983-36017	19830307 <--
US 4546176	A	19851008	US 1983-544406	19831020 <--
AU 8320827	A	19840621	AU 1983-20827	19831031 <--
GB 2132613	A	19840711	GB 1983-29554	19831104 <--
GB 2132613	B	19860508		
NL 8304272	A	19840702	NL 1983-4272	19831212 <--
FR 2569195	A1	19860221	FR 1983-19876	19831212 <--
FR 2569195	B1	19870109		
BE 898442	A1	19840613	BE 1983-212036	19831213 <--
SE 8306882	A	19840615	SE 1983-6882	19831213 <--
DK 8305721	A	19840627	DK 1983-5721	19831213 <--
CH 656131	A5	19860613	CH 1983-6649	19831213 <--
AT 8304352	A	19861215	AT 1983-4352	19831214 <--
PRIORITY APPLN. INFO.:			JP 1982-217726	A 19821214
			JP 1983-36017	A 19830307
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE			IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):		MARPAT 101:230234		
GI				





AB Cephalosporins I [R = R3, R7, R8; R1 = H, OMe; R2 = acyloxy, heterocyclylthio, (un)substituted pyridinium inner salt; R4 = H, alkyl; R5, R6 = OH, alkanoyloxy, alkoxycarbonyloxy] were prepared. Thus, 7-[D-amino(4-hydroxyphenyl)acetamido]cephalosporanic acid was N-4-methoxybenzyloxycarbonylated and converted to the 4-methoxybenzyloxycarbonylmethyl ether, followed by deblocking and acylation with R3COCl (R4 = H, R5 = 6-OH, R6 = 7-OH) to give I (R = R3, R1 = R4 = H, R2 = OAc, R5 = 6-OH, R6 = 7-OH) (II). II had a min. inhibitory concentration against *Escherichia coli* NIHJ of 0.2 µg/mL.

IT 93243-97-1P

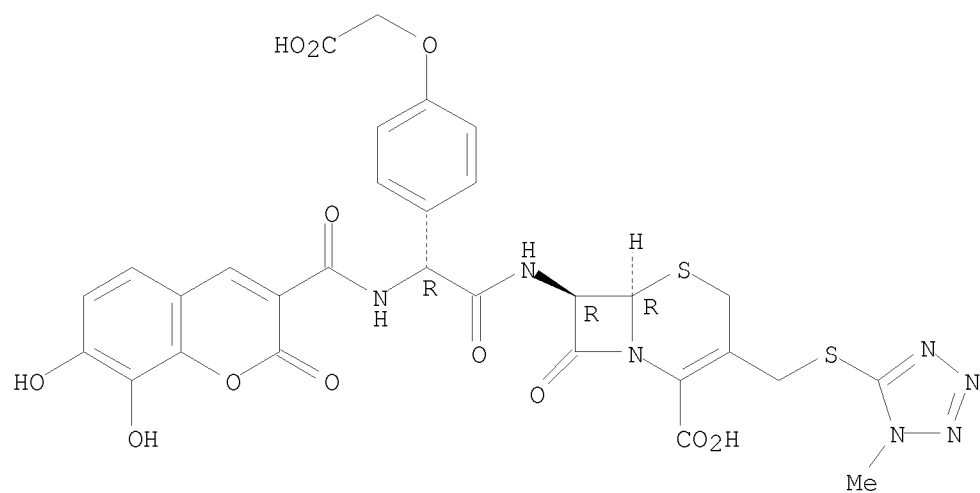
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 93243-97-1 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[[4-(carboxymethoxy)phenyl][[(7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3-[[[1-methyl-1H-tetrazol-5-yl]thio]methyl]-8-oxo-, [6R-[6α,7β(R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

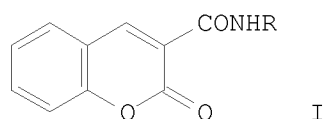
10/513699



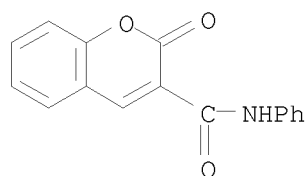
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 226 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1984:551717 CAPLUS  
DOCUMENT NUMBER: 101:151717  
ORIGINAL REFERENCE NO.: 101:22963a,22966a  
TITLE: Some reactions of coumarins with hydrazine and  
ethylenediamine  
AUTHOR(S): Islam, A. M.; Aly, F. M.; El-Sharief, A. M. S.;  
Bedair, A. H.; El-Masry, F. M.  
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
SOURCE: Egyptian Journal of Chemistry (1983), 26(3),  
233-9  
CODEN: EGJCA3; ISSN: 0367-0422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 101:151717  
GI

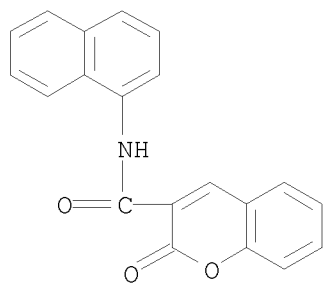


AB 3-Coumarincarboxamides I (R = Ph, tolyl, ClC6H4, naphthyl) were cleaved by  
N2H4 to yield CH2(CONHR)CONHNH2. The reaction of I (R = tolyl, ClC6H4)  
with H2NCH2CH2NH2 gave CH2(CONHCH2CH2NH2)CONHC6H4R1 (R1 = Me, Cl).  
IT 54396-25-7 72788-19-3  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(ring cleavage of, by hydrazine)  
RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

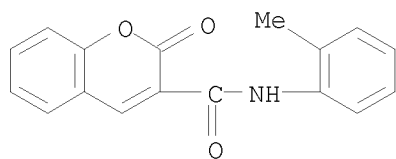


RN 72788-19-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-1-naphthalenyl-2-oxo- (CA INDEX NAME)

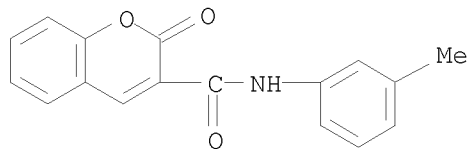
10/513699



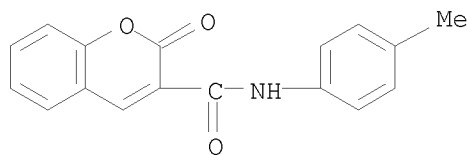
IT 1846-98-6 1846-99-7 1847-00-3  
1847-02-5 74556-29-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(ring cleavage of, by hydrazine and ethylenediamine)  
RN 1846-98-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 1846-99-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)

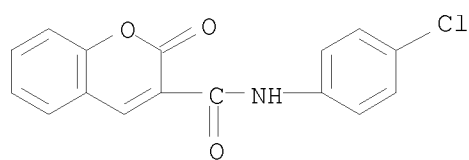


RN 1847-00-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



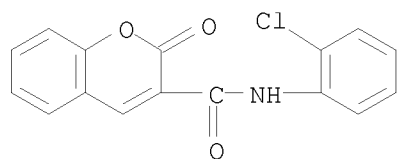
RN 1847-02-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)

10/513699



RN 74556-29-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-2-oxo- (CA INDEX NAME)

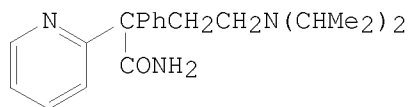


OS.CITING REF COUNT: 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS  
RECORD (36 CITINGS)

L9 ANSWER 227 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1984:544170 CAPLUS  
 DOCUMENT NUMBER: 101:144170  
 ORIGINAL REFERENCE NO.: 101:21717a, 21720a  
 TITLE: Disopyramide immunogens, antibodies, labeled  
 conjugates, and related derivatives  
 INVENTOR(S): Buckler, Robert Thomas; Thompson, Stephan George  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: Eur. Pat. Appl., 30 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 113100	A2	19840711	EP 1983-112826	19831220 <--
R: CH, DE, FR, GB, IT, LI, NL, SE				
AU 8320405	A	19840705	AU 1983-20405	19831019 <--
AU 544710	B2	19850613		
JP 59130869	A	19840727	JP 1983-245603	19831228 <--
US 4647668	A	19870303	US 1985-736100	19850520 <--
PRIORITY APPLN. INFO.:			US 1983-455224	A 19830103
OTHER SOURCE(S):	MARPAT 101:144170			

GI



AB Antibodies to and labeled conjugates of disopyramide (I) [3737-09-5] are prepared for use in nonradioisotopic immunoassay of I in biol. fluids. The immunogens comprise I coupled by an ether linkage on the Ph-group to an immunogenic carrier substance. Likewise, the labeled conjugates and synthetic intermediates are Ph-ether derivs. of I.

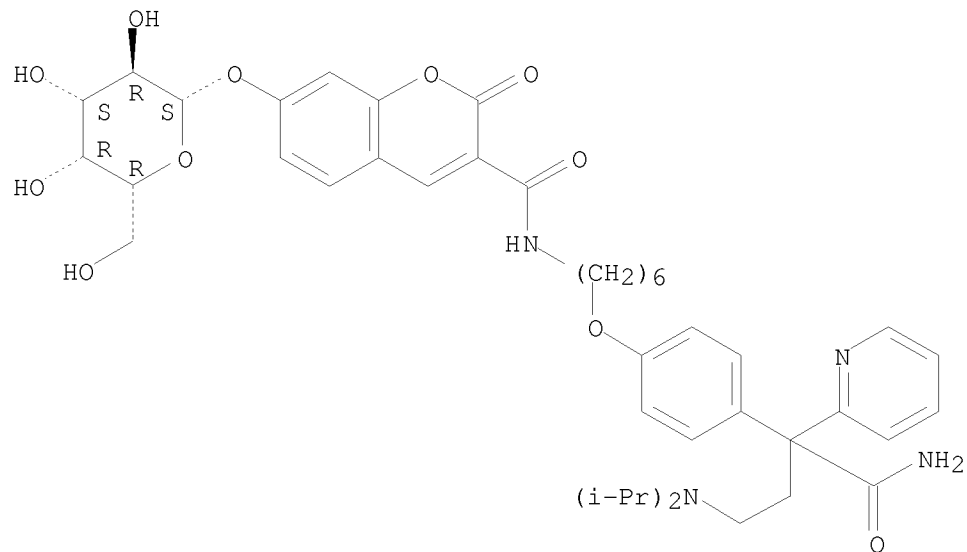
IT 92131-58-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for disopyramide immunoassay)

RN 92131-58-3 CAPLUS

CN 2-Pyridineacetamide,  $\alpha$ -[2-[bis(1-methylethyl)amino]ethyl]- $\alpha$ -[4-[[6-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]hexyl]oxy]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

10/513699



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 228 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1984:544169 CAPLUS  
DOCUMENT NUMBER: 101:144169  
ORIGINAL REFERENCE NO.: 101:21717a,21720a  
TITLE: Procainamide and NAPA immunogens, antibodies, labeled  
conjugates, and related derivatives  
INVENTOR(S): Buckler, Robert Thomas; Ward, Frederick Edmund  
PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
SOURCE: Eur. Pat. Appl., 34 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 113102	A2	19840711	EP 1983-112863	19831221 <--
R: CH, DE, FR, GB, IT, LI, NL, SE				
AU 8320583	A	19840705	AU 1983-20583	19831026 <--
AU 546777	B2	19850919		
JP 59130848	A	19840727	JP 1983-245602	19831228 <--
US 4673763	A	19870616	US 1985-713041	19850318 <--
US 4795828	A	19890103	US 1986-911524	19860925 <--
PRIORITY APPLN. INFO.:			US 1983-455223	A 19830103
			US 1985-713041	A3 19850318
OTHER SOURCE(S):	MARPAT 101:144169			
GI				



AB Antibodies to and labeled conjugates of procainamide (I) [51-06-9] and N-acetylprocainamide (NAPA) [32795-44-1] are prepared for use in nonradioisotopic immunoassay of the 2 agents in biol. fluids. The immunogens comprise the drugs coupled at the  $\alpha$ -position of the amide-side chain to an immunogenic carrier material. The labeled conjugates and synthetic intermediates are also  $\alpha$ -position derivs. of the drugs or their precursors.

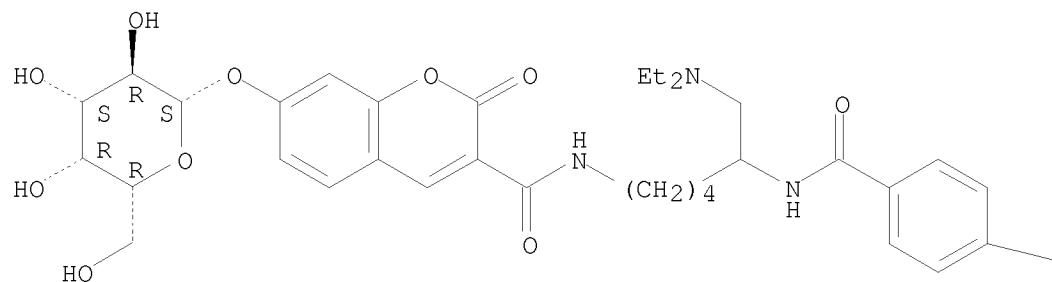
IT 92117-20-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for procainamide or acetylprocainamide immunoassay)

RN 92117-20-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[5-[(4-aminobenzoyl)amino]-6-(diethylamino)hexyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.





NH<sub>2</sub>

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

L9 ANSWER 229 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1984:510767 CAPLUS

DOCUMENT NUMBER: 101:110767

ORIGINAL REFERENCE NO.: 101:16913a,16916a

TITLE: Tricyclic antidepressant drug immunogens, antibodies, labeled conjugates, and related derivatives

INVENTOR(S): Buckler, Robert Thomas; Ward, Frederick Edmund

PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA

SOURCE: Eur. Pat. Appl., 61 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 107134	A1	19840502	EP 1983-110063	19831008 <--
EP 107134	B1	19860409		
R: CH, DE, FR, GB, IT, LI, NL, SE				
US 4495281	A	19850122	US 1982-435633	19821021 <--
IL 69460	A	19861130	IL 1983-69460	19830809 <--
CA 1240986	A1	19880823	CA 1983-434320	19830810 <--
AU 8317879	A	19840503	AU 1983-17879	19830811 <--
AU 554345	B2	19860814		
JP 59132362	A	19840730	JP 1983-195377	19831020 <--
JP 02031347	B	19900712		

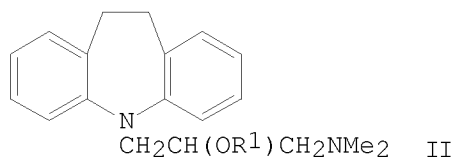
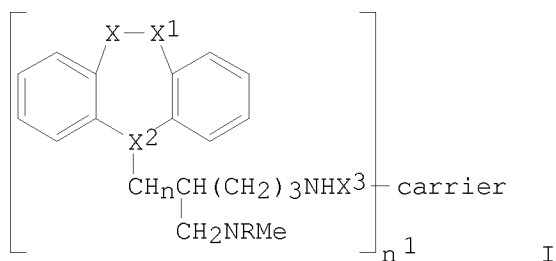
PRIORITY APPLN. INFO.:

US 1982-435633 A 19821021

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 101:110767

GI



AB Title compds. I (R = H, Me; X = CH<sub>2</sub>, X<sub>1</sub> = CH<sub>2</sub>, O; X = X<sub>1</sub> = CH; X<sub>2</sub> = C, n = 1; X<sub>2</sub> = N, CH, n = 2; X<sub>3</sub> = bond, linking group; n<sub>1</sub> = 1-50; carrier = immunogenic carrier material), useful in immunoassays, were prepared. Thus imiprimine derivative II (R<sub>1</sub> = H) was O-alkylated with H<sub>2</sub>C:CHCN to give II (R<sub>1</sub> = CH<sub>2</sub>CH<sub>2</sub>CN), which was reduced to form II [R = (CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>] (III). III was

10/513699

treated with N6-(5-carboxypentyl)FAD to give FAD-labeled III-conjugate (IV). An immunoassay test solution containing IV showed an absorbance of 0.624 at a serum imiprimine concentration of 100 ng/mL.

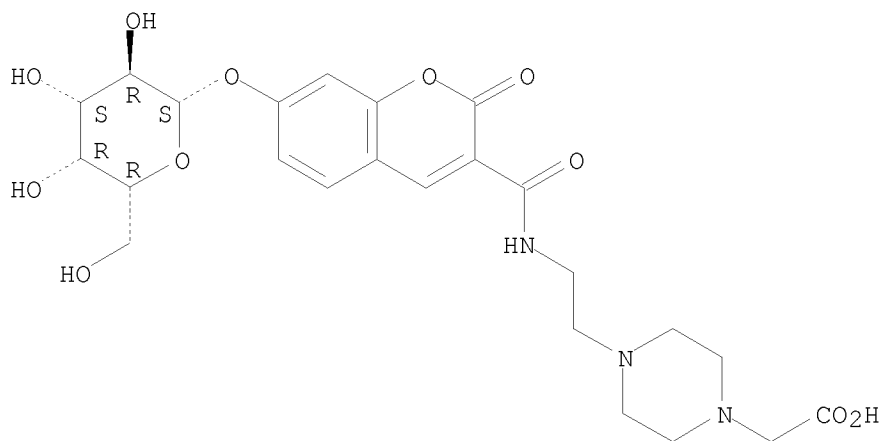
IT 87980-98-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, with dibenzazepine)

RN 87980-98-1 CAPLUS

CN 1-Piperazineacetic acid, 4-[2-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



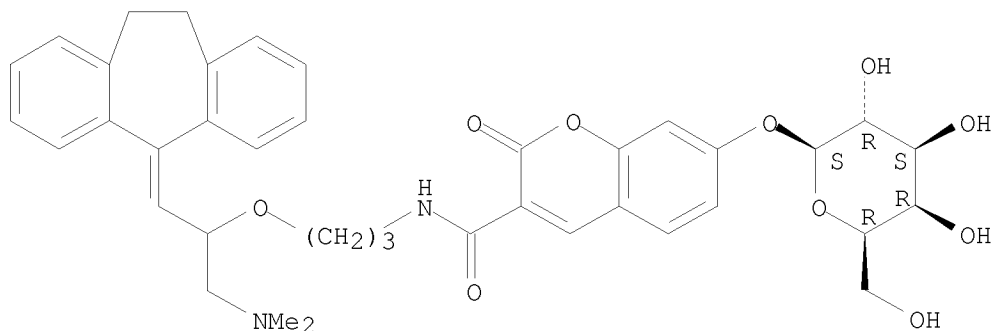
IT 91755-69-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and use of, in immunoassay)

RN 91755-69-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[2-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[(dimethylamino)methyl]ethoxy]propyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



IT 91755-67-8P  
91755-71-4P

91755-68-9P

91755-70-3P

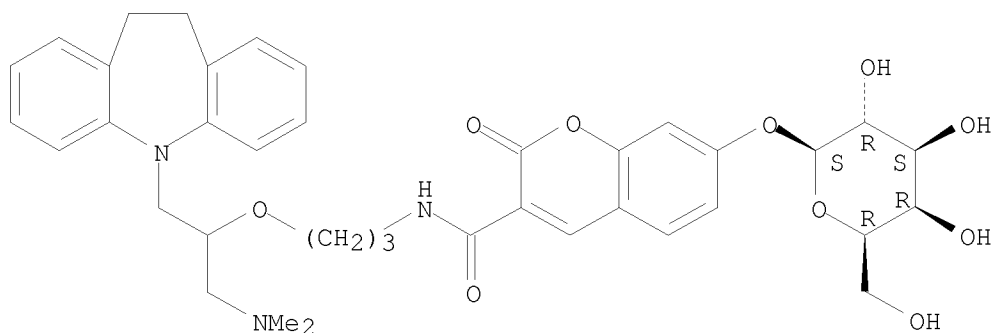
10/513699

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 91755-67-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[2-(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)-1-[(dimethylamino)methyl]ethoxy]propyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

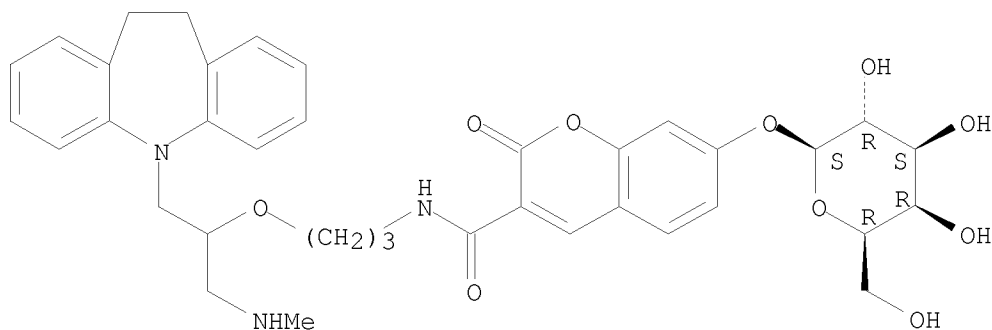
Absolute stereochemistry.



RN 91755-68-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[3-[2-(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)-1-[(methylamino)methyl]ethoxy]propyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

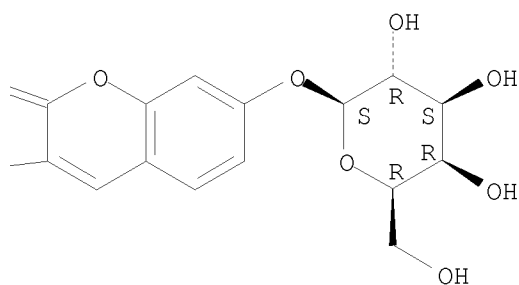
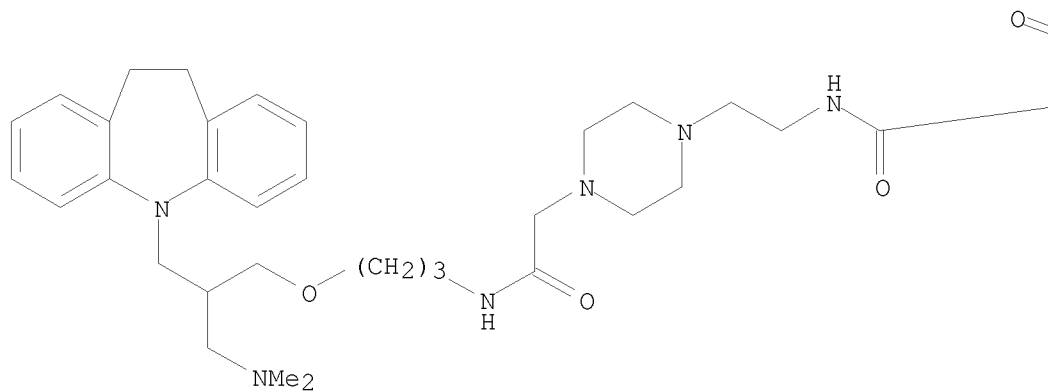
Absolute stereochemistry.



RN 91755-70-3 CAPLUS

CN 1-Piperazineacetamide, N-[3-[3-(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)-2-[(dimethylamino)methyl]propoxy]propyl]-4-[2-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]- (CA INDEX NAME)

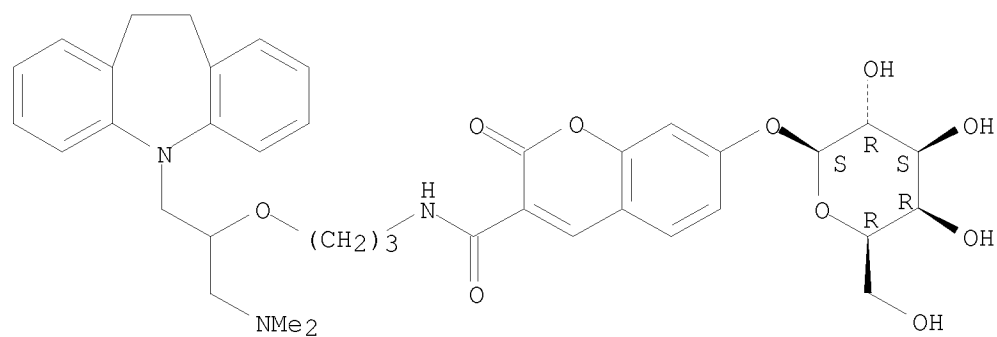
Absolute stereochemistry.



RN 91755-71-4 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-[3-[2-(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)-1-[(dimethylamino)methyl]ethoxy]propyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



● HCl

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS  
RECORD (10 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 230 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1984:486891 CAPLUS  
 DOCUMENT NUMBER: 101:86891  
 ORIGINAL REFERENCE NO.: 101:13297a,13300a  
 TITLE: Preparing homogeneous specific binding assay element  
 to avoid premature reaction  
 INVENTOR(S): Greenquist, Alfred C.; Rupchock, Patricia A.; Tyhach,  
 Richard J.; Walter, Bert  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: U.S., 34 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4447529	A	19840508	US 1981-280260	19810706 <--
CA 1179262	A1	19841211	CA 1982-401582	19820423 <--
PRIORITY APPLN. INFO.:			US 1981-280260	A 19810706

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A device for homogeneous binding assays e.g., immunoassays, for the  
 determination

of ligands, e.g., drugs, in liquid samples is described which consists of a solid carrier, e.g., test strip, containing all of the necessary reagents to perform a given assay, and produces a quant. response when contacted with the sample. For example, a test strip for a substrate-labeled fluorescence immunoassay for gentamicin was prepared as follows: (1)  $\beta$ -galactosylumbelliferone sisomicin was prepared by mixing 7- $\beta$ -galactosylcoumarin-3-carboxylic acid and sisomicin sulfate at pH 3.8 in the presence of HCl and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide HCl; (2) antiserum to gentamicin was prepared by a conventional method; (3) antiserum in Bicine buffer containing MgCl<sub>2</sub> and  $\beta$ -galactosidase at pH 8.3 was prepared, and a sheet of filter paper was impregnated with this solution and dried; (4) then this reagent paper was impregnated with the solution of conjugate prepared in (1) and dried; (5) the reagent-impregnated paper was laminated onto silver Mylar and then laminated onto a polystyrene support. This layered reagent paper was cut into small strips (0.5 + 1.0 cm). Sample solution (35  $\mu$ L) was placed on the exposed side of the test paper, and the fluorescence was measured after 15 min with a fluorometer (excitation 405 nm; emission 450 nm). The response range was 0-5  $\mu$ g/mL.

IT 79181-84-3P

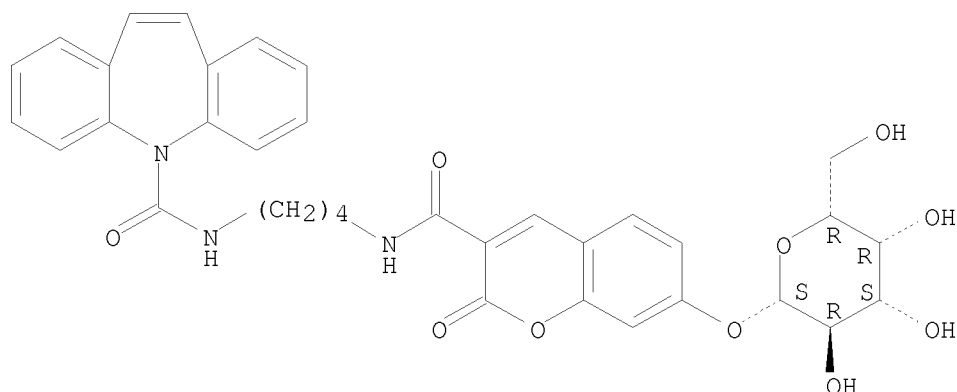
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for fluorescence immunoassay of carbamazepine with test strips)

RN 79181-84-3 CAPLUS

CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
 N-[4-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]butyl]- (CA INDEX NAME)

Absolute stereochemistry.

10/513699



IT 79181-75-2P

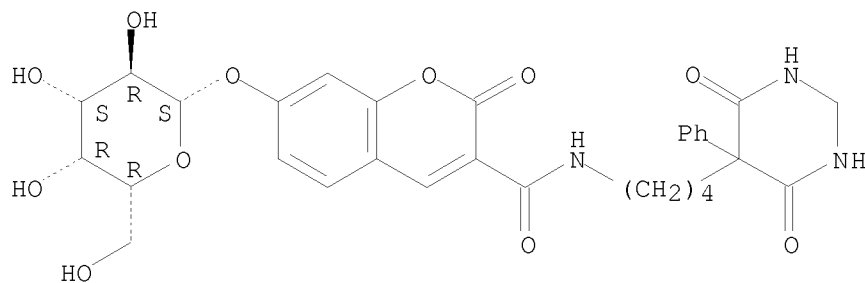
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, for fluorescence immunoassay of primidone with test strips)

RN 79181-75-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[4-(hexahydro-4,6-dioxo-5-phenyl-5-pyrimidinyl)butyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



IT 79181-90-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, for fluorescence immunoassay of theophylline with test strips)

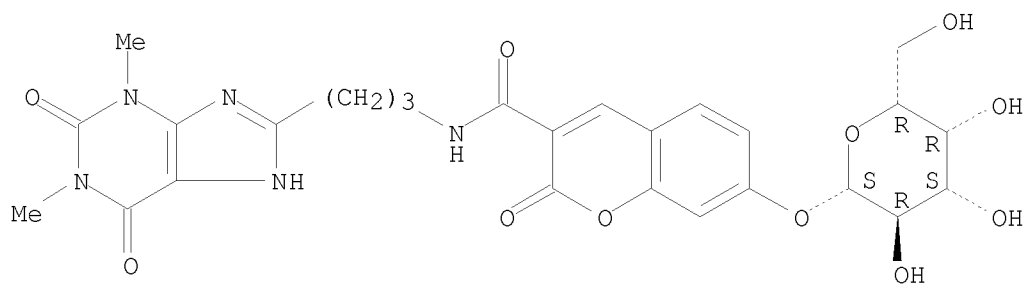
RN 79181-90-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[3-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

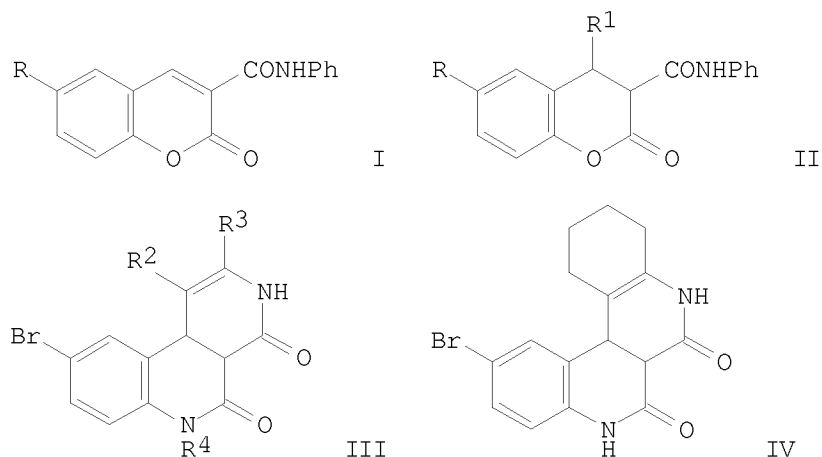


10/513699



OS.CITING REF COUNT:	6	THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT:	11	THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 231 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1984:472564 CAPLUS  
 DOCUMENT NUMBER: 101:72564  
 ORIGINAL REFERENCE NO.: 101:11189a,11192a  
 TITLE: Action of Grignard reagents and ketones on  
 3-(N-phenylcarbamoyl)coumarins and spectral data of  
 the products  
 AUTHOR(S): El-Kady, Mohamed; Sayed, Galal H.; Mansour, Adel;  
 El-Sherif, Mohamed  
 CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
 SOURCE: Polish Journal of Chemistry (1982),  
 56(10-12), 1393-8  
 CODEN: PJCHDQ; ISSN: 0137-5083  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 101:72564  
 GI



AB Grignard reagents  $R_1MgX$  ( $R_1 = Me$ ,  $X = iodo$ ;  $R_1 = Ph$ ,  $Pr$ ,  $p$ -tolyl,  $X = Br$ ;  $R_1 = PhCH_2$ ,  $CMe_3$ ,  $X = Cl$ ) reacted with carbamoylcoumarins I ( $R = H$ ,  $Br$ ) to give dihydrocoumarins II via a hydroxybenzopyran intermediate. Michael condensation of I ( $R = Br$ ) with ketones  $R_2CH_2COR_3$  ( $R_2 = H$ ,  $R_3 = Me$ ;  $R_2 = R_3 = Me$ ;  $R_2 = Me$ ,  $R_3 = Et$ ) in the presence of  $NH_4OAc$  or  $EtNH_2$  at room temperature or  $170^\circ$  gave phenanthrolines III ( $R_4 = H$ ,  $Et$ ). Cyclohexanone gave the annulated derivative IV.

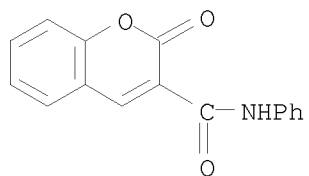
IT 54396-25-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Grignard reactions of)

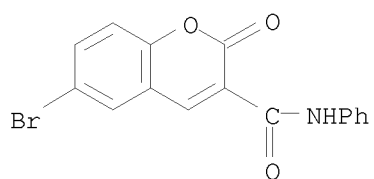
RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

10/513699



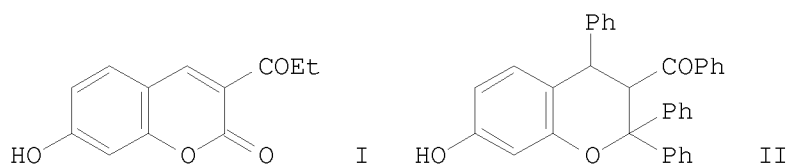
IT 38485-82-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with Grignard reagents or ketones)  
RN 38485-82-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-phenyl- (CA INDEX NAME)



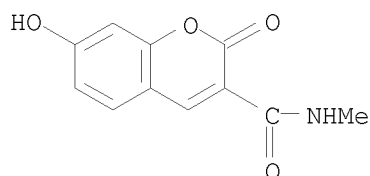
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

10/513699

L9 ANSWER 232 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1984:454863 CAPLUS  
DOCUMENT NUMBER: 101:54863  
ORIGINAL REFERENCE NO.: 101:8517a,8520a  
TITLE: Some reactions with 7-hydroxy-3-carbethoxycoumarin  
AUTHOR(S): Mohamed, M. M.; Hassan, M. A.; El-Borai, M.  
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
SOURCE: Journal of the Chemical Society of Pakistan ( 1983), 5(4), 263-6  
CODEN: JCSPDF; ISSN: 0253-5106  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

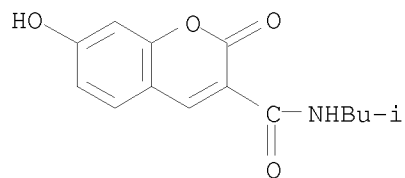


AB Reaction of the title compound (I) with hydrazines, amines and Grignard reagents were described. E.g., reaction of I with PhNHNH<sub>2</sub> gave 24% 2,4-(HO)2C<sub>6</sub>H<sub>3</sub>CH:C(NHNHPh)CONHNHPh whereas reaction of I with PhMgBr gave 27% chroman II.  
IT 91153-71-8P 91153-72-9P 91153-73-0P  
91153-74-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 91153-71-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-N-methyl-2-oxo- (CA INDEX NAME)



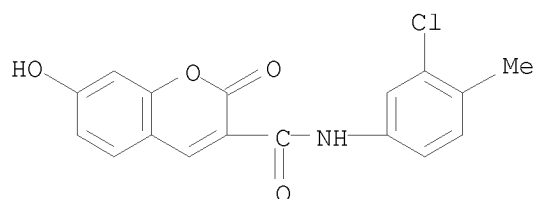
RN 91153-72-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-N-(2-methylpropyl)-2-oxo- (CA INDEX NAME)

10/513699



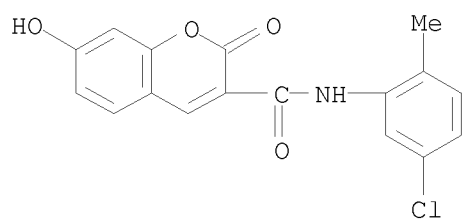
RN 91153-73-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-4-methylphenyl)-7-hydroxy-2-oxo-  
(CA INDEX NAME)



RN 91153-74-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(5-chloro-2-methylphenyl)-7-hydroxy-2-oxo-  
(CA INDEX NAME)



L9 ANSWER 233 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1984:451263 CAPLUS  
 DOCUMENT NUMBER: 101:51263  
 ORIGINAL REFERENCE NO.: 101:7923a,7926a  
 TITLE: Homogeneous specific binding assay device and  
 preformed complex method  
 INVENTOR(S): Greenquist, Alfred C.; Walter, Bert  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: U.S., 21 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4442204	A	19840410	US 1981-253147	19810410 <--
CA 1201975	A1	19860318	CA 1982-400764	19820408 <--
PRIORITY APPLN. INFO.:			US 1981-253147	A 19810410

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The title test element for determining ligands (antigens, haptens, or antibodies) is described which comprises a solid carrier member, such as a fibrous web matrix, e.g., paper, or a polymeric film or gel, incorporated with reagents for a homogeneous specific binding assay system which produces a detectable response, usually an electromagnetic radiation signal, that is a function of the presence or amount of the ligand in the sample. For example, disclosed is a test device for determining a ligand in a liquid sample, comprising (1) a reagent composition including a complex of

(ii) a labeled conjugate comprising a label component coupled to the ligand or a specific binding analog thereof, and (iii) a specific binding partner for the ligand, the label providing a detectable response, or interacting with a detectant system to provide a detectable response, which is different when the labeled conjugate is bound by the binding partner compared to when it is not so bound, whereby the detectable response is a function of the presence of the ligand in the sample, and (2) a carrier incorporated with the complex. Useful homogeneous specific binding assay systems include those involving enzyme substrate labels, enzyme prosthetic group labels, and enzyme labels. The detectable response preferably is a luminescent, fluorescent, spectrophotometric, or colorimetric response, which is measurable by visual observation or instrument means. For example, a gentamicin immunoassay was described which used gentamicin antiserum, a labeled sisomicin conjugate, and  $\beta$ -galactosidase. The dose response range with the test element was 0-2.0  $\mu\text{g/mL}$ .

IT 79181-84-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

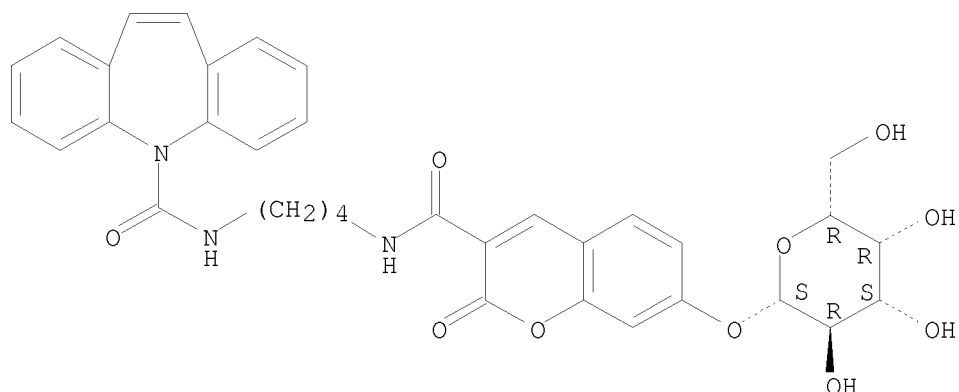
(preparation of, for carbamazepine determination by immunoassay with test element)

RN 79181-84-3 CAPLUS

CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
 N-[4-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]butyl]- (CA INDEX NAME)

Absolute stereochemistry.

10/513699



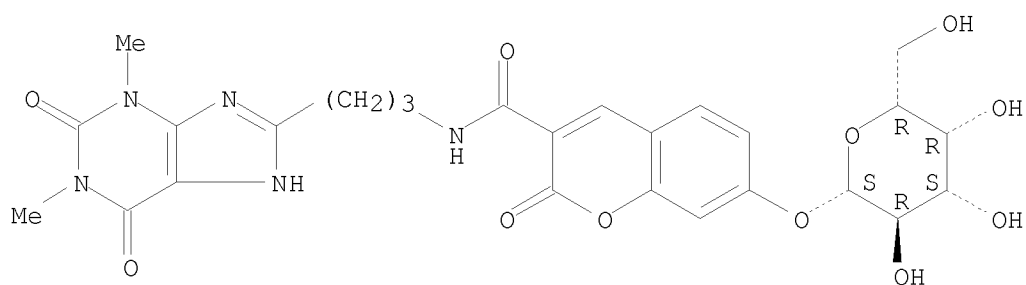
IT 79181-90-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for theophylline immunoassay with test element)

RN 79181-90-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[3-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 20

THERE ARE 20 CAPLUS RECORDS THAT CITE THIS  
RECORD (20 CITINGS)

REFERENCE COUNT: 17

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 234 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1984:400687 CAPLUS  
 DOCUMENT NUMBER: 101:687  
 ORIGINAL REFERENCE NO.: 101:119a,122a  
 TITLE: Digoxigenin immunogens, antibodies, labeled  
 conjugates, and related derivatives  
 INVENTOR(S): Albarella, James Paul  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: Eur. Pat. Appl., 27 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 104527	A1	19840404	EP 1983-108977	19830912 <--
EP 104527	B1	19870225		
R: CH, DE, FR, GB, IT, LI, NL, SE				
US 4469797	A	19840904	US 1982-422217	19820923 <--
AU 8316416	A	19840329	AU 1983-16416	19830630 <--
AU 541321	B2	19850103		
CA 1213579	A1	19861104	CA 1983-431573	19830630 <--
JP 59083056	A	19840514	JP 1983-174442	19830922 <--
JP 02031346	B	19900712		

PRIORITY APPLN. INFO.: US 1982-422217 A 19820923

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 101:687

AB Immunogen conjugates comprising digoxigenin derivs., particularly carboxy and amino functionalized derivs. coupled to conventional immunogenic carrier materials, and antidigoxin antibodies prepared against such immunogen conjugates are prepared and are useful in immunoassays for determining

digoxin [20830-75-5] in biol. fluids. For example, 3-digoxigenone [4442-17-5] and 6-aminocaproic acid [60-32-2] in MeOH are coupled using Na cyanoborohydride to give 3-[N-(5-carboxypentyl)amino]-3-desoxydigoxigenin [90468-20-5]. This latter compound is coupled to serum albumin and antiserum prepared by treatment of rabbits.

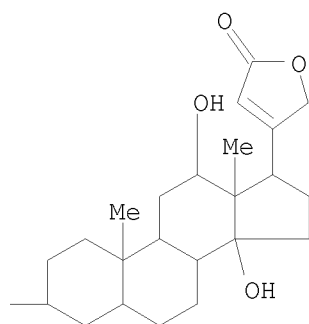
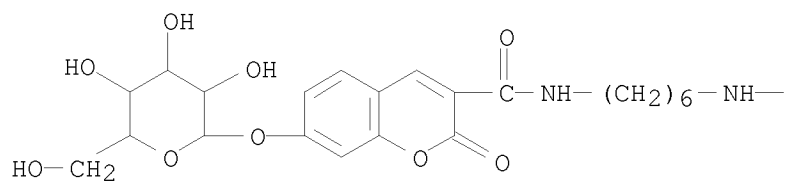
IT 90468-21-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 90468-21-6 CAPLUS

CN Card-20(22)-enolide, 3-[[6-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]hexyl]amino]-12,14-dihydroxy-, (3 $\beta$ ,5 $\beta$ ,12 $\beta$ )- (9CI) (CA INDEX NAME)

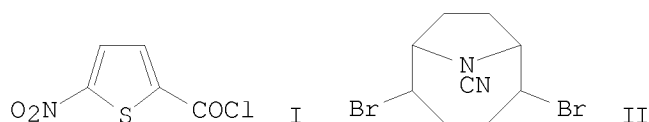




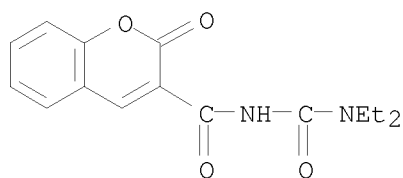
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

10/513699

L9 ANSWER 235 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1984:191658 CAPLUS  
DOCUMENT NUMBER: 100:191658  
ORIGINAL REFERENCE NO.: 100:29131a,29134a  
TITLE: New heterocyclic chloroformamidines  
AUTHOR(S): Ried, Walter; Kuembel, Brigitte  
CORPORATE SOURCE: Inst. Org. Chem., Univ. Frankfurt/Main,  
Frankfurt/Main, D-6000/70, Fed. Rep. Ger.  
SOURCE: Chemiker-Zeitung (1984), 108(1), 17-18  
CODEN: CMKZAT; ISSN: 0009-2894  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
OTHER SOURCE(S): CASREACT 100:191658  
GI

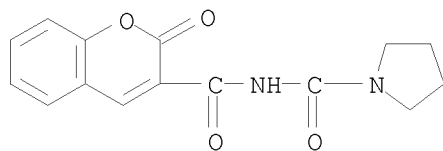


AB Heterocyclic acid chlorides reacted with dialkylcyanamides to give  
N-acylcarbimidoyl chlorides, 18 of which were prepared For example, acid  
chloride I and cyanamide II gave 89%  
2,5-dibromo-N-[(5-nitro-2-thienyl)carbonyl]-9-azabicyclo[4.2.1]nonane-9-  
carbimidoyl chloride.  
IT 90036-29-6P 90036-30-9P 90051-89-1P  
90051-90-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 90036-29-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[(diethylamino)carbonyl]-2-oxo- (CA  
INDEX NAME)



RN 90036-30-9 CAPLUS  
CN 1-Pyrrolidinecarboxamide, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-,  
hydrochloride (1:2) (CA INDEX NAME)

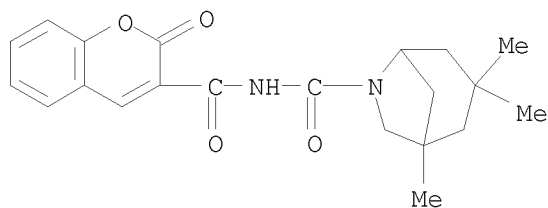
10/513699



● 2 HCl

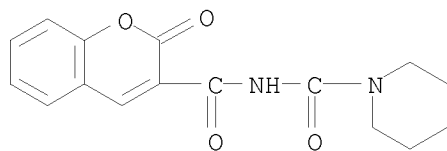
RN 90051-89-1 CAPLUS

CN 6-Azabicyclo[3.2.1]octane-6-carboxamide,  
1,3,3-trimethyl-N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



RN 90051-90-4 CAPLUS

CN 1-Piperidinecarboxamide, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



10/513699

L9 ANSWER 236 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1984:151040 CAPLUS

DOCUMENT NUMBER: 100:151040

ORIGINAL REFERENCE NO.: 100:22893a,22896a

TITLE: Propranolol immunogens, their antibodies, test device and compounds for propranolol immunoassay

INVENTOR(S): Buckler, Robert T.; Carrico, Robert J.

PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA

SOURCE: Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 95639	A2	19831207	EP 1983-104791	19830516 <--
EP 95639	A3	19840808		
R: CH, DE, FR, GB, IT, LI, NL, SE				
US 4472301	A	19840918	US 1982-383340	19820527 <--
AU 8311139	A	19831201	AU 1983-11139	19830204 <--
JP 58216124	A	19831215	JP 1983-90847	19830525 <--

PRIORITY APPLN. INFO.: US 1982-383340 A 19820527

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 100:151040

AB An immunoassay for propranolol [525-66-6] is described. Propranolol immunogens which are 3-(1-naphthoxy-2-hydroxypropylamine [90-15-3] and 3-N-[2-hydroxy-3-(1-naphthoxy)-1-propyl]aminobutyric acid [106-89-8] coupled to bovine serum albumin were used to prepare antibodies. Fluorescence-labeled conjugates ( $\beta$ -galactosylumbelliferone derivs.) of the above propranolol derivs. were prepared and used with the antibody and  $\beta$ -galactosidase to quantitate propranolol levels. The reagents are used to prepare an immunoassay kit.

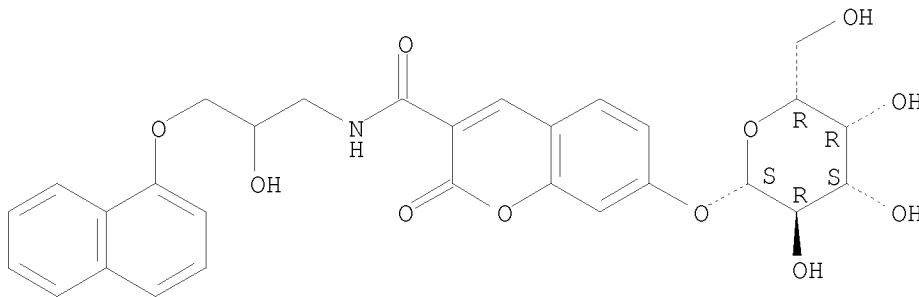
IT 89499-06-9P 89499-11-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for propranolol immunoassay)

RN 89499-06-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-N-[2-hydroxy-3-(1-naphthalenyloxy)propyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



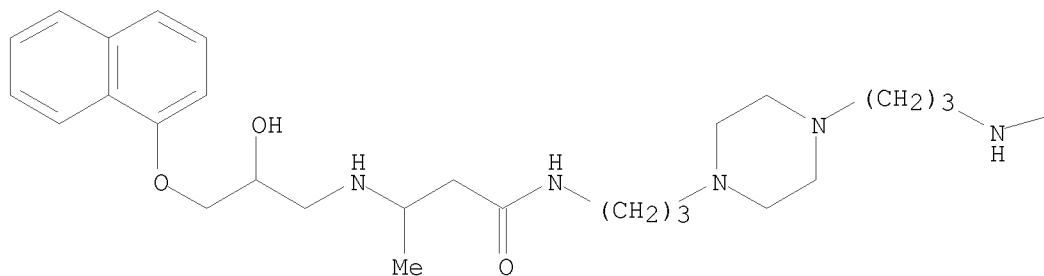
RN 89499-11-6 CAPLUS

10/513699

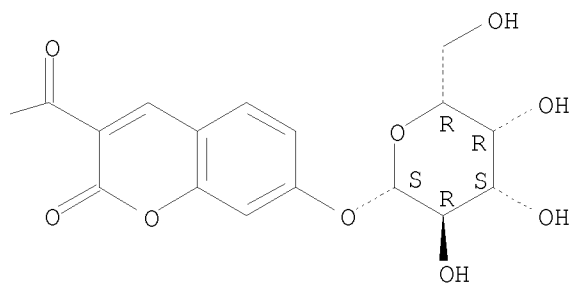
CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-N-[3-[4-[3-  
[[3-[[2-hydroxy-3-(1-naphthalenyloxy)propyl]amino]-1-  
oxobutyl]amino]propyl]-1-piperazinyl]propyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



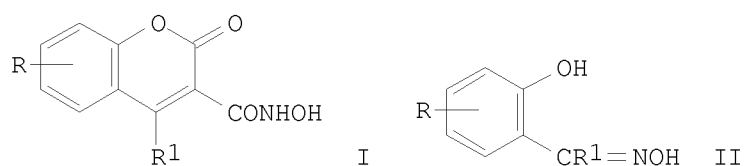
PAGE 1-B



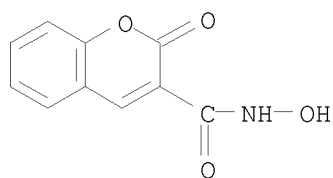
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

10/513699

L9 ANSWER 237 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1984:120824 CAPLUS  
DOCUMENT NUMBER: 100:120824  
ORIGINAL REFERENCE NO.: 100:18381a,18384a  
TITLE: Novel reactions of carbon suboxide. IV. Synthesis of  
some N-hydroxy-2-oxo-2H-1-benzopyran-3-carboxamides  
AUTHOR(S): Bonsignore, Leonardo; Loy, Giuseppe; Secci, Mario;  
Cabiddu, Salvatore  
CORPORATE SOURCE: Ist. Chim. Farm. Tossicol., Univ. Cagliari, Cagliari,  
09100, Italy  
SOURCE: Tetrahedron Letters (1983), 24(45), 5013-16  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 100:120824  
GI

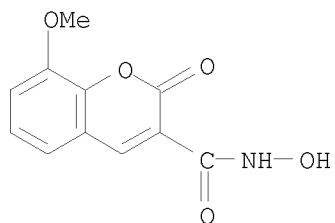


AB Some benzopyrancarboxamides I (R = H, Br, Me, MeO; R1 = H, Me) were prepared  
by reaction of C3O2 with 2-hydroxyaryloximes II.  
IT 89228-60-4P 89228-61-5P 89228-63-7P  
89228-64-8P 89228-65-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 89228-60-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-2-oxo- (CA INDEX NAME)



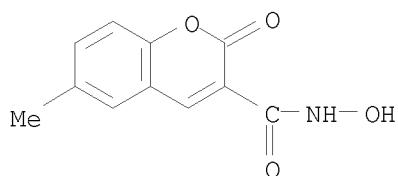
RN 89228-61-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-8-methoxy-2-oxo- (CA INDEX NAME)

10/513699



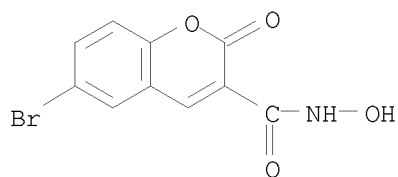
RN 89228-63-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-6-methyl-2-oxo- (CA INDEX NAME)



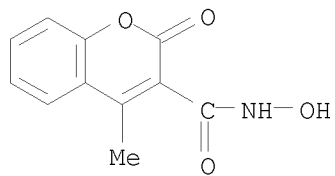
RN 89228-64-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-hydroxy-2-oxo- (CA INDEX NAME)



RN 89228-65-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hydroxy-4-methyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 4

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 238 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1984:114990 CAPLUS

DOCUMENT NUMBER: 100:114990

ORIGINAL REFERENCE NO.: 100:17361a,17364a

TITLE: Labelled conjugates of ethosuximide, ethosuximide immunogens, their antibodies, an immunoassay method employing the antibodies and reagent means, test kit and test device for the immunoassay method

INVENTOR(S): Buckler, Robert T.; Wong, Raphael C.

PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA

SOURCE: Eur. Pat. Appl., 34 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 95665	A1	19831207	EP 1983-104929	19830519 <--
EP 95665	B1	19860806		
R: CH, DE, FR, GB, IT, LI, NL, SE				
IL 68364	A	19860731	IL 1983-68364	19830412 <--
AU 8313475	A	19831215	AU 1983-13475	19830413 <--
AU 540288	B2	19841108		
JP 59016874	A	19840128	JP 1983-95108	19830531 <--
PRIORITY APPLN. INFO.:			US 1982-383599	A 19820601

OTHER SOURCE(S): MARPAT 100:114990

AB The derivative of ethosuximide (I) 2-(4-aminobutyl)-3-ethyl-3-methylsuccinimide [89139-72-0] was prepared, conjugated to bovine serum albumin, and the conjugate used to prepare antiserums to I in rabbits. The labeled ethosuximide conjugate 2-[4-(7- $\beta$ -galactosylcoumarin-3-carboxamido)butyl]-3-ethyl-3-methylsuccinimide [89139-73-1] was also prepared. A homogeneous substrate-labeled fluorescent immunoassay for I in human blood serum is described using the above materials and measuring the fluorescence intensity at an excitation wavelength of 400 nm and an emission wavelength of 450 nm.

IT 89139-73-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, for ethosuximide immunoassay in blood of humans)

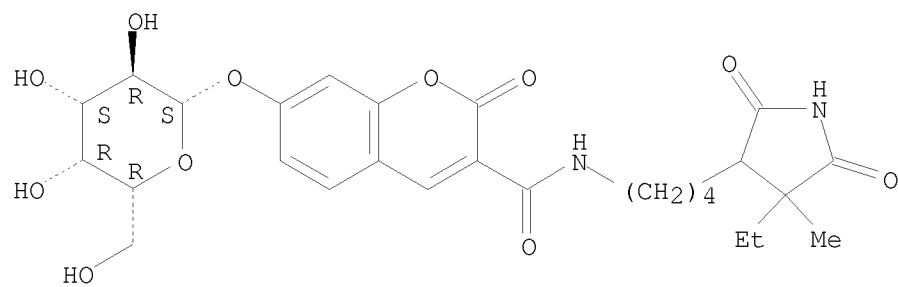
RN 89139-73-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(4-ethyl-4-methyl-2,5-dioxo-3-pyrrolidinyl)butyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



10/513699



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 239 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1984:3092 CAPLUS

DOCUMENT NUMBER: 100:3092

ORIGINAL REFERENCE NO.: 100:535a,538a

TITLE: Specific binding assay method, reagent system and labelled conjugate for use in this method

INVENTOR(S): Buckler, Robert Thomas; Li, Thomas M.

PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA

SOURCE: Eur. Pat. Appl., 72 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 87564	A1	19830907	EP 1983-100413	19830119 <--
R: DE, FR, GB, IT				
AU 8290949	A	19830811	AU 1982-90949	19821129 <--
JP 58142257	A	19830824	JP 1983-14481	19830131 <--
PRIORITY APPLN. INFO.:			US 1982-344607	A 19820201
OTHER SOURCE(S):	MARPAT 100:3092			

AB Methods were developed for preparation of photophore-analyte conjugates for specific binding assays with improved sensitivities. These conjugates were prepared by joining analyte and photogenic label with a relatively rigid linking groups (compared to conventional flexible linking groups) to reduce the quenching effects of analyte on label photogenicity. Ten percent or more of the photogenicity of the unconjugated photophore was preserved, this photogenicity was measured and converted to the quantity of the analyte to be determined. For example, a substrate-labeled fluorescent immunoassay for quinidine was developed. Four conjugates of  $\beta$ -galactosyl-umbelliferone-quinidine were prepared with different linking arms for umbelliferone-quinidine: (CH<sub>2</sub>)<sub>4</sub>-(I); -(CH<sub>2</sub>)<sub>12</sub>-(II); -(CH<sub>2</sub>)<sub>2</sub>-piperazinyl-(CH<sub>2</sub>)<sub>2</sub>-(III); and -(CH<sub>2</sub>)<sub>3</sub>-piperazinyl-(CH<sub>2</sub>)<sub>3</sub>-NHCO-(CH<sub>2</sub>)<sub>4</sub>-(IV). Umbelliferone fluorescences of I, II, III, IV, were 5.2, 4.3, 42.4, 31.2%, resp., of unconjugated umbelliferone. Because umbelliferone fluorescence was measured and converted to quinidine quantity, the use of III and IV improved assay sensitivity.

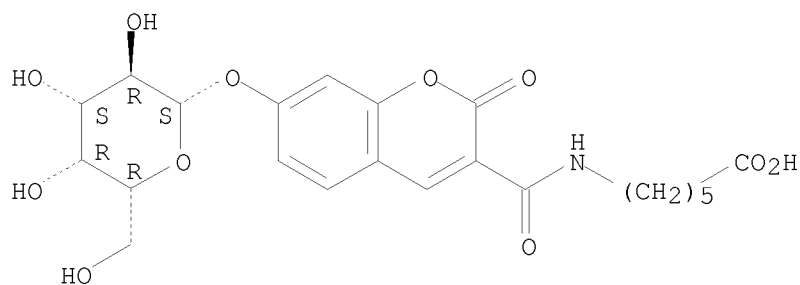
IT 87980-94-7P 87980-98-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 87980-94-7 CAPLUS

CN Hexanoic acid, 6-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

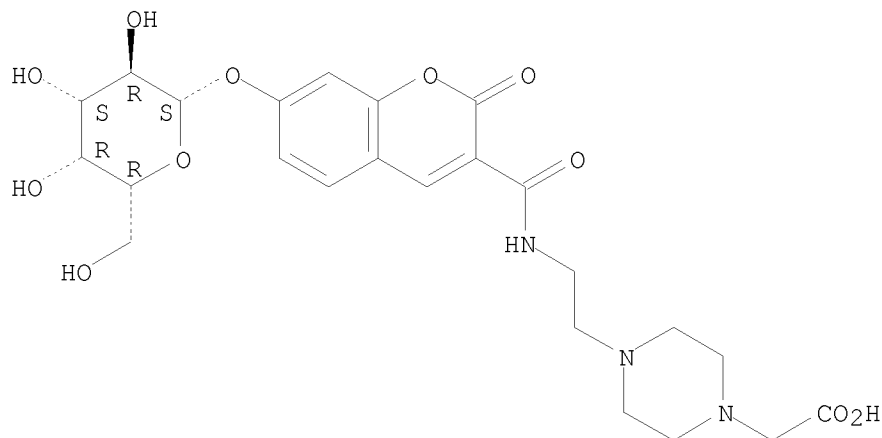
10/513699



RN 87980-98-1 CAPLUS

CN 1-Piperazineacetic acid, 4-[2-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



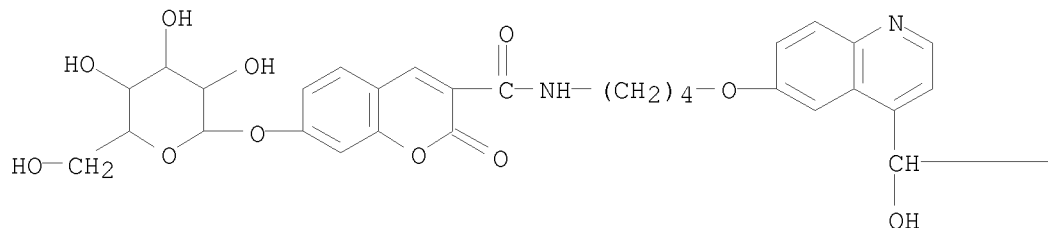
IT 87980-80-1P 87980-83-4P 87980-87-8P  
87980-90-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for quinidine fluorescence immunoassay)

RN 87980-80-1 CAPLUS

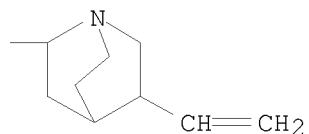
CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[4-[[[9S]-9-hydroxycinchonan-6'-yl]oxy]butyl]-2-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A

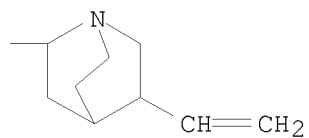
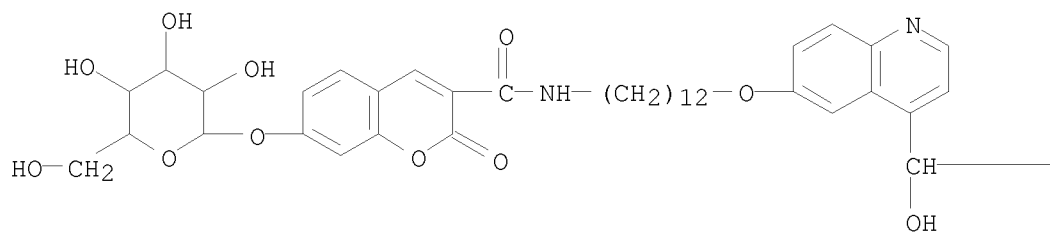


<12/04/2007>

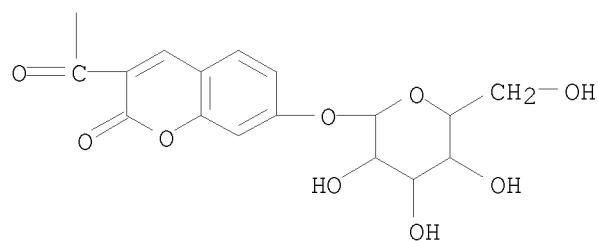
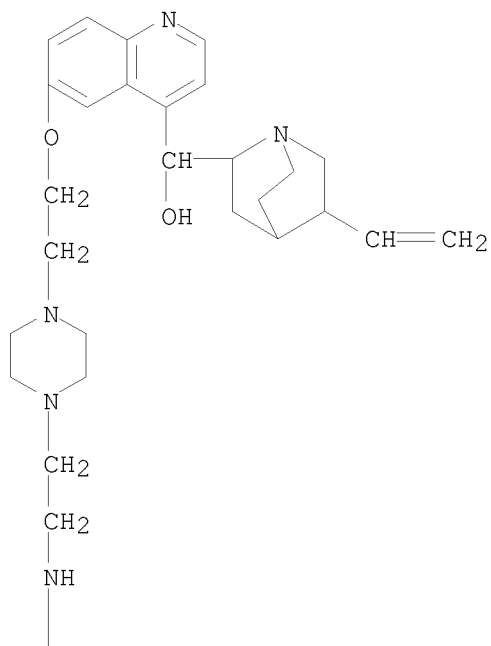
Erich Leese



RN 87980-83-4 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-N-[12-  
 [[(9S)-9-hydroxycinchonan-6'-yl]oxy]dodecyl]-2-oxo- (9CI) (CA INDEX NAME)

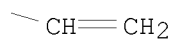
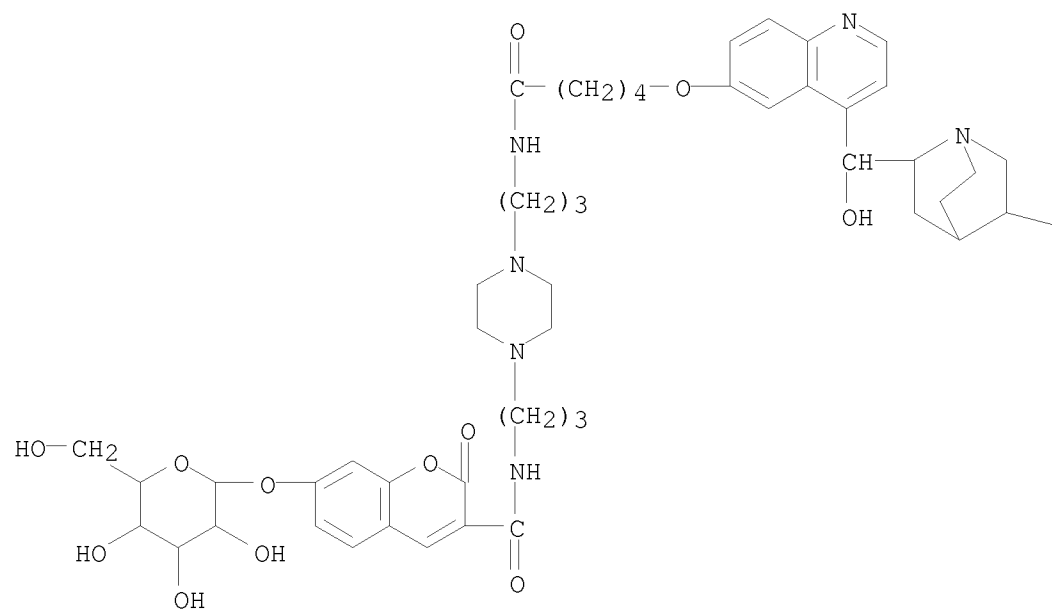


RN 87980-87-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-N-[2-[4-[2-  
 [[(9S)-9-hydroxycinchonan-6'-yl]oxy]ethyl]-1-piperazinyl]ethyl]- (9CI)  
 (CA INDEX NAME)



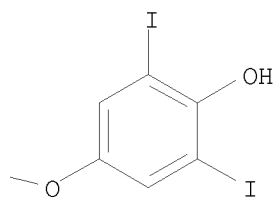
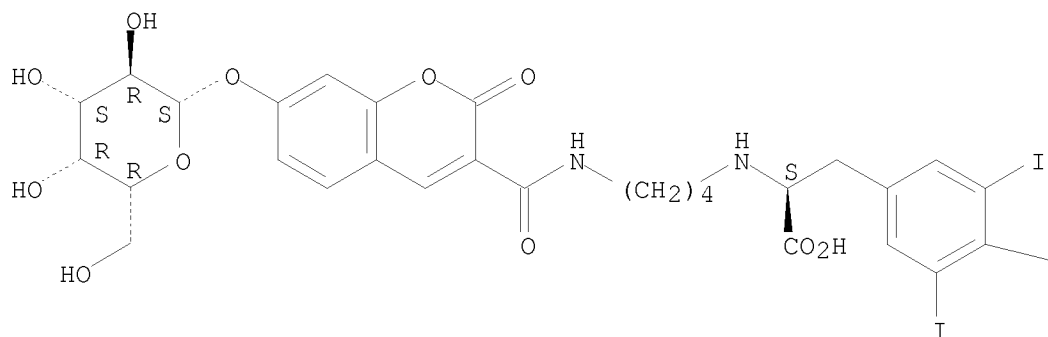
RN 87980-90-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[3-[4-[3-[[5-[[[(9S)-9-hydroxycinchonan-6'-yl]oxy]-1-oxopentyl]amino]propyl]-1-piperazinyl]propyl]-2-oxo- (9CI) (CA INDEX NAME)



IT 87980-91-4P 87980-92-5P 87980-93-6P  
 87980-95-8P 87980-99-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for thyroxine specific binding assay)  
 RN 87980-91-4 CAPLUS  
 CN L-Tyrosine, N-[4-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]butyl]-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (CA INDEX NAME)

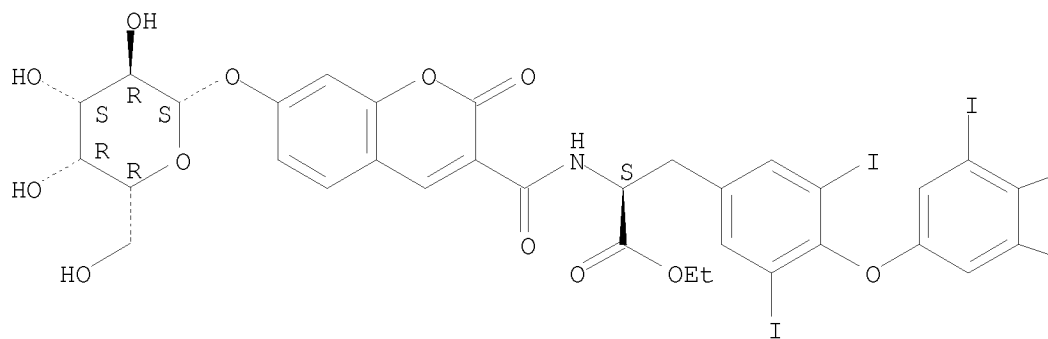
Absolute stereochemistry.



RN 87980-92-5 CAPLUS

CN L-Tyrosine, N-[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo-, ethyl ester (CA INDEX NAME)

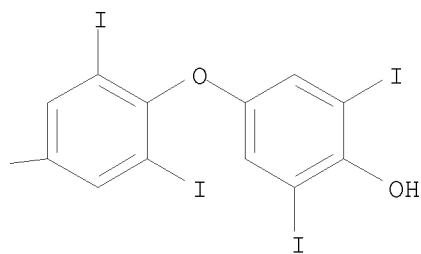
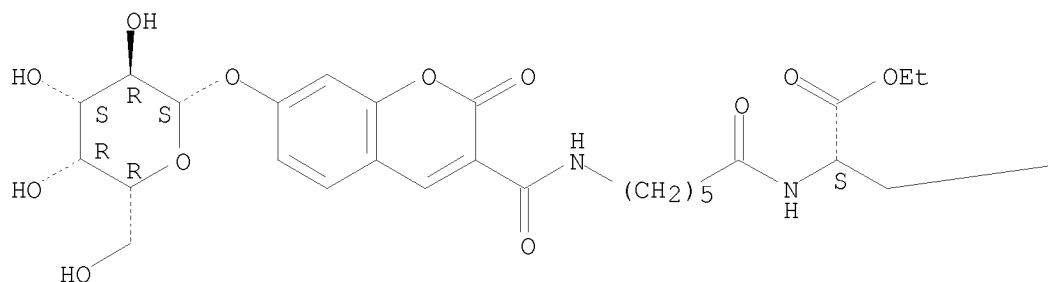
Absolute stereochemistry.





RN 87980-93-6 CAPLUS  
 CN L-Tyrosine, N-[6-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-1-oxohexyl]-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo-, ethyl ester (CA INDEX NAME)

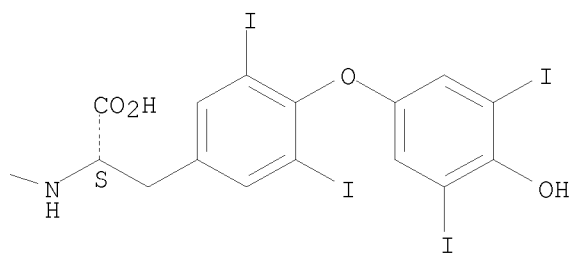
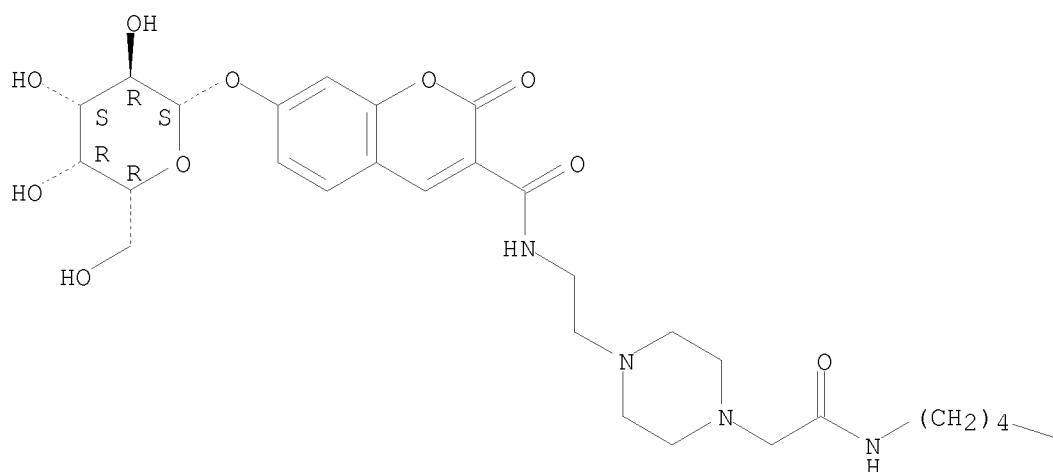
Absolute stereochemistry.



RN 87980-95-8 CAPLUS  
 CN L-Tyrosine, N-[4-[[[4-[2-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]-1-piperazinyl]acetyl]amino]butyl]-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

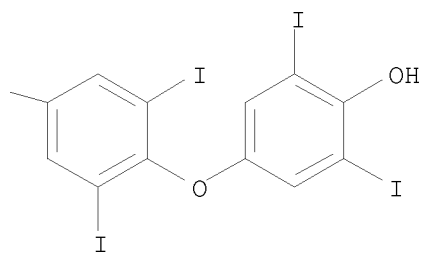
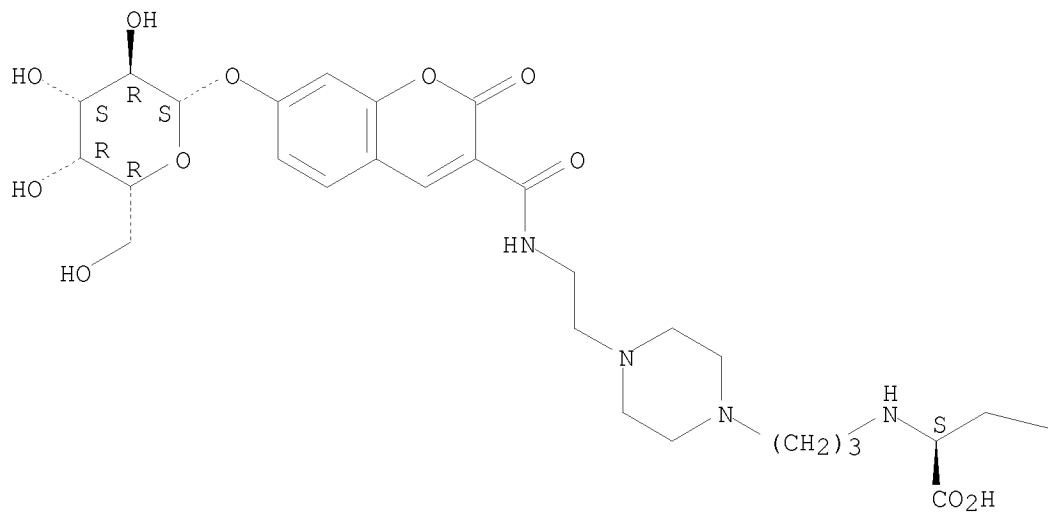




RN 87980-99-2 CAPLUS

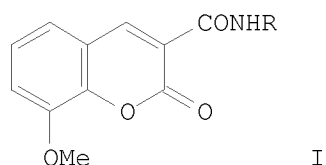
CN L-Tyrosine, N-[3-[4-[2-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]-1-piperazinyl]propyl]-O-(4-hydroxy-3,5-diiodophenyl)-3,5-diiodo- (CA INDEX NAME)

Absolute stereochemistry.

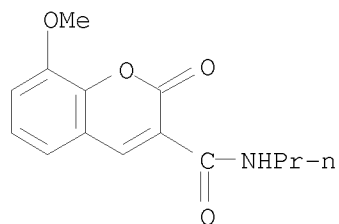


10/513699

L9 ANSWER 240 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:611993 CAPLUS  
DOCUMENT NUMBER: 99:211993  
ORIGINAL REFERENCE NO.: 99:32611a,32614a  
TITLE: Fragmentation mechanisms of some coumarincarboxamide derivatives  
AUTHOR(S): Abd El Rahman, A. H.  
CORPORATE SOURCE: Fac. Sci., Mansoura Univ., Mansoura, Egypt  
SOURCE: Egyptian Journal of Chemistry (1982), 25(5), 485-9  
CODEN: EGJCA3; ISSN: 0367-0422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

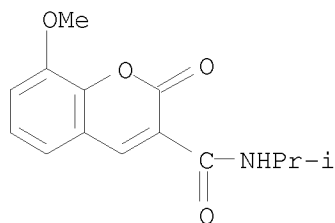


AB Mass spectral fragmentation patterns for coumarins (I; R = Pr, o-, p-MeC6H4, Ph, etc.) were determined  
IT 87872-52-4 87872-53-5 87872-54-6  
87872-55-7 87872-56-8 87872-57-9  
87872-58-0 87872-59-1 87872-60-4  
RL: PRP (Properties)  
(mass spectra of)  
RN 87872-52-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo-N-propyl- (CA INDEX NAME)



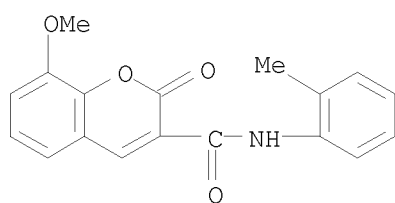
RN 87872-53-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(1-methylethyl)-2-oxo- (CA INDEX NAME)

10/513699



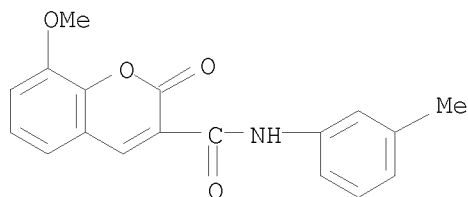
RN 87872-54-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)



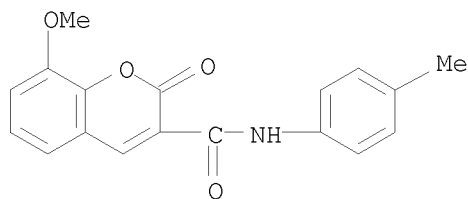
RN 87872-55-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 87872-56-8 CAPLUS

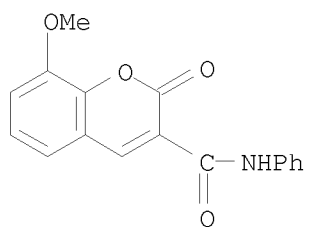
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



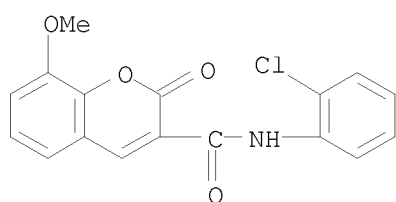
RN 87872-57-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo-N-phenyl- (CA INDEX NAME)

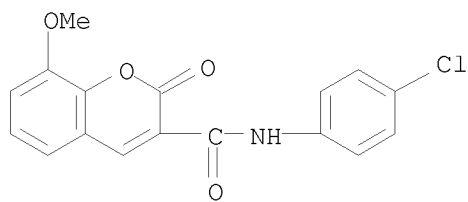
10/513699



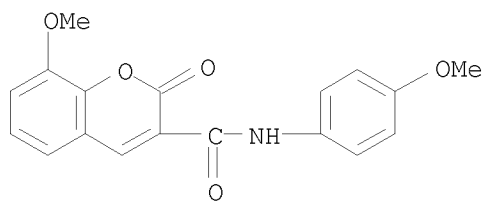
RN 87872-58-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-8-methoxy-2-oxo- (CA  
INDEX NAME)



RN 87872-59-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-8-methoxy-2-oxo- (CA  
INDEX NAME)



RN 87872-60-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-(4-methoxyphenyl)-2-oxo- (CA  
INDEX NAME)



L9 ANSWER 241 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1983:518608 CAPLUS

DOCUMENT NUMBER: 99:118608

ORIGINAL REFERENCE NO.: 99:18203a,18206a

TITLE: Homogeneous substrate-labeled fluorescent immunoassay for human serum albumin

AUTHOR(S): Patinkin, Jonathan; Inbar, Dan; Ben-Gigi, Chana; Derfler, Sara; Klausner, Yakir; Fridlender, Bertold

CORPORATE SOURCE: Dep. Res. Dev., Ames-Yisum Ltd., Jerusalem, Israel

SOURCE: Journal of Immunoassay (1983), 4(2), 159-74

CODEN: JOUIDK; ISSN: 0197-1522

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A homogeneous substrate-labeled fluorescent immunoassay for human serum albumin (HSA) was developed which is similar to previously described immunoassays for IgG and IgM. HSA was covalently linked to N-(6-aminohexyl)-7-( $\beta$ -O-galactopyranoside)coumarin-3-carboxamide. The resulting conjugate had minimal fluorescence at 450 nm (with excitation at 400 nm). However, when the acetal linkage of the galactosyl moiety was hydrolyzed by  $\beta$ -galactosidase, a substantial increase in the fluorescence was obtained. This increase was specifically inhibited by antibody to HSA. A competitive binding immunoassay was established by letting the conjugate compete with HSA in the serum for the limited number of antibody-binding sites. The level of fluorescence resulting from the addition of enzyme was proportional to the amount of HSA in the serum. The immunoassay was compared to an albumin assay which used the dye-binding method.

IT 77750-09-5DP, reaction products with human serum albumin

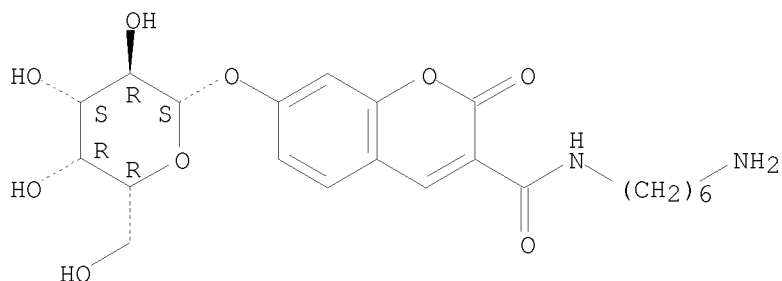
RL: PREP (Preparation)

(preparation of, for albumin determination by fluorescence immunoassay)

RN 77750-09-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(6-aminohexyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



10/513699

L9 ANSWER 242 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:505050 CAPLUS  
DOCUMENT NUMBER: 99:105050  
ORIGINAL REFERENCE NO.: 99:16165a,16168a  
TITLE:  $\beta$ -Lactam antibacterial agents  
INVENTOR(S): Milner, Peter Henry  
PATENT ASSIGNEE(S): Beecham Group PLC, UK  
SOURCE: Eur. Pat. Appl., 282 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
EP 71395	A1	19830209	EP 1982-303821	19820721 <--
EP 71395	B1	19880810		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
GB 2107307	A	19830427	GB 1982-21059	19820721 <--
GB 2107307	B	19860226		
AT 36334	T	19880815	AT 1982-303821	19820721 <--
DK 8203309	A	19830126	DK 1982-3309	19820723 <--
FI 8202606	A	19830126	FI 1982-2606	19820723 <--
FI 78702	B	19890531		
FI 78702	C	19890911		
NO 8202538	A	19830126	NO 1982-2538	19820723 <--
NO 162192	B	19890814		
NO 162192	C	19891122		
ZA 8205296	A	19830525	ZA 1982-5296	19820723 <--
HU 27347	A2	19831028	HU 1982-2381	19820723 <--
HU 188983	B	19860528		
AU 8286351	A	19841018	AU 1982-86351	19820723 <--
AU 568062	B2	19871217		
US 4539149	A	19850903	US 1982-401266	19820723 <--
CA 1216576	A1	19870113	CA 1982-407903	19820723 <--
PL 145252	B1	19880831	PL 1982-237640	19820723 <--
PL 146092	B1	19881231	PL 1982-261915	19820723 <--
PL 146182	B1	19890131	PL 1982-248815	19820723 <--
JP 58038288	A	19830305	JP 1982-128353	19820724 <--
IL 67222	A	19860429	IL 1982-67222	19821110 <--
US 4609652	A	19860902	US 1985-694592	19850124 <--
US 4877783	A	19891031	US 1985-694622	19850124 <--
GB 2161803	A	19860122	GB 1985-14519	19850607 <--
GB 2161803	B	19860723		
PRIORITY APPLN. INFO.:				
			GB 1981-23033	A 19810725
			GB 1981-23034	A 19810725
			GB 1981-36823	A 19811207
			GB 1981-36824	A 19811207
			GB 1982-7966	A 19820318
			GB 1982-9953	A 19820403
			GB 1982-9954	A 19820403
			GB 1982-15007	A 19820522
			EP 1982-303821	A 19820721
			GB 1982-21059	A3 19820721
			US 1982-401266	A3 19820723

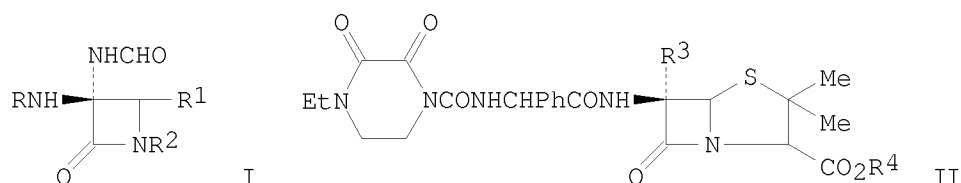
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

<12/04/2007>

Erich Leese

10/513699

OTHER SOURCE(S): CASREACT 99:105050  
GI



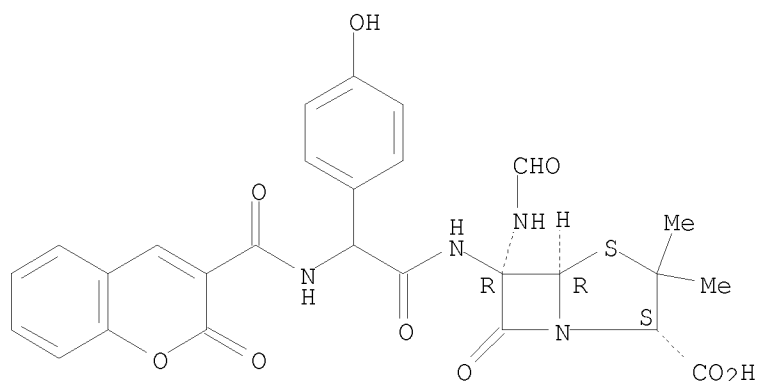
AB  $\beta$ -Lactams I (R = H, acyl; R1R2 = atoms required to complete a penam, cephem, or oxadithiacephem system) were prepared. Thus II (R3 = SMe, R4 = CH2Ph) was treated with NH3 to give II (R3 = NH2, R4 = CH2Ph) which was formylated with HCO2Ac to give II (R3 = NHCHO, R4 = CH2Ph). Hydrogenolysis of the ester group and treatment with BuCH<sub>2</sub>CO<sub>2</sub>Na gave II (R3 = NHCHO, R4 = Na) which had a min. inhibitory concentration against *Proteus mirabilis* 889 of 0.2  $\mu$ g/mL.

IT 86070-25-9P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 86070-25-9 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(formylamino)-6-[[[4-hydroxyphenyl][[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3,3-dimethyl-7-oxo-, monosodium salt, [2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na

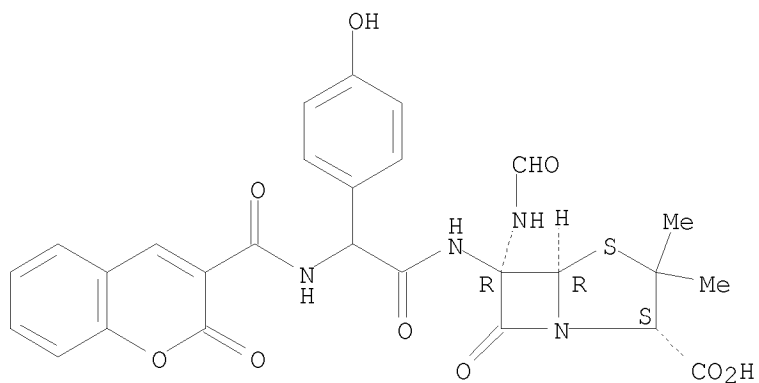
IT 86070-68-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 86070-68-0 CAPLUS



10/513699

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-(formylamino)-6-[[ (4-hydroxyphenyl) [[ (2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-(2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

L9 ANSWER 243 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1983:501944 CAPLUS  
 DOCUMENT NUMBER: 99:101944  
 ORIGINAL REFERENCE NO.: 99:15676h,15677a  
 TITLE: Multilayer analytical element having an impermeable  
 radiation diffusing and blocking layer  
 INVENTOR(S): Walter, Bert  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: U.S., 17 pp. Cont.-in-part of U.S. Ser. No. 280,805,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4390343	A	19830628	US 1982-369632	19820419 <--
EP 69281	A1	19830112	EP 1982-105549	19820624 <--
EP 69281	B1	19850925		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 15834	T	19851015	AT 1982-105549	19820624 <--
CA 1178536	A1	19841127	CA 1982-405976	19820625 <--
NO 8202271	A	19830107	NO 1982-2271	19820630 <--
NO 161286	B	19890417		
NO 161286	C	19890726		
FI 8202364	A	19830107	FI 1982-2364	19820702 <--
FI 74819	B	19871130		
FI 74819	C	19880310		
IL 66210	A	19860731	IL 1982-66210	19820702 <--
DK 8203017	A	19830107	DK 1982-3017	19820705 <--
DK 156925	B	19891016		
DK 156925	C	19900312		
AU 8285598	A	19830113	AU 1982-85598	19820705 <--
AU 548963	B2	19860109		
JP 58017365	A	19830201	JP 1982-116676	19820705 <--
JP 63048312	B	19880928		
PRIORITY APPLN. INFO.:			US 1981-280805	A2 19810706
			US 1982-369632	A 19820419
			EP 1982-105549	A 19820624

# ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A multilayer test element is described which has a reagent layer, a radiation diffusing and blocking layer, and a support layer. The apparatus is improved by having a radiation diffusing and blocking layer which is (1) interposed between the reagent and support layers, (2) impermeable to the ligand, reagents of the reagent layer, and products of their interaction, and (3) inert to the same. The title element is suggested for ligand determination in body fluids. For example, theophylline was determined by fluorescent immunoassay with an element containing TiO<sub>2</sub> in the impermeable radiation diffusing and blocking layer in the range 0-41 µg/mL, which covers the therapeutic range.

IT 79181-86-5P 79181-87-6P 79181-88-7P  
 79181-89-8P 79181-90-1P

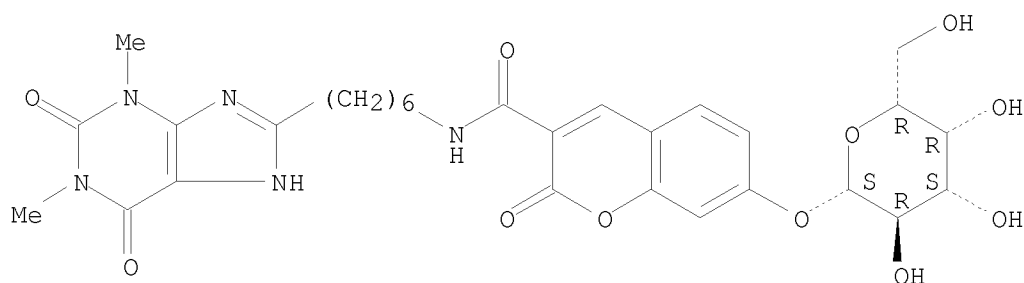
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as label for fluorescent immunoassay of theophylline)

10/513699

RN 79181-86-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[6-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)hexyl]- (9CI)  
(CA INDEX NAME)

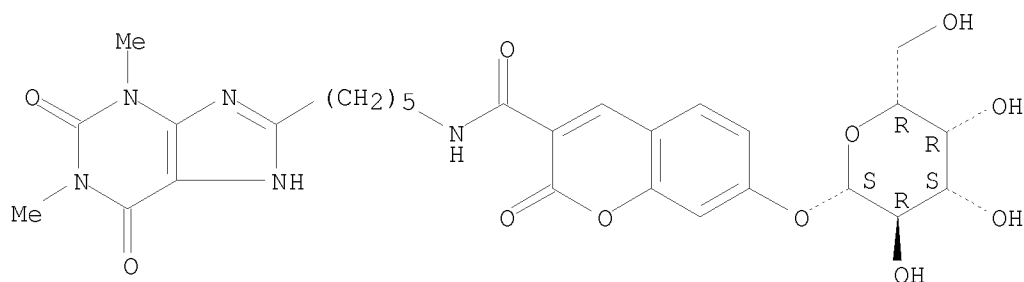
Absolute stereochemistry.



RN 79181-87-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[5-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)pentyl]- (9CI)  
(CA INDEX NAME)

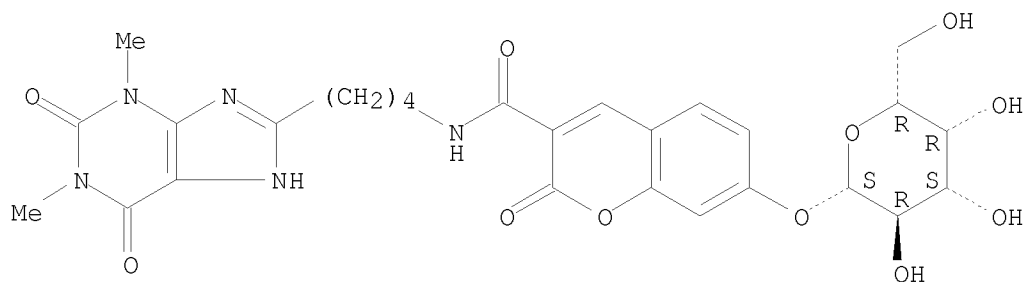
Absolute stereochemistry.



RN 79181-88-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[4-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)butyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

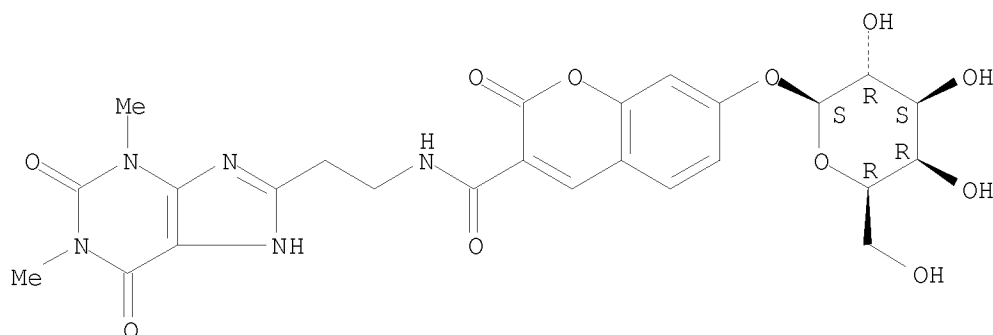


10/513699

RN 79181-89-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[2-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)ethyl]- (9CI)  
(CA INDEX NAME)

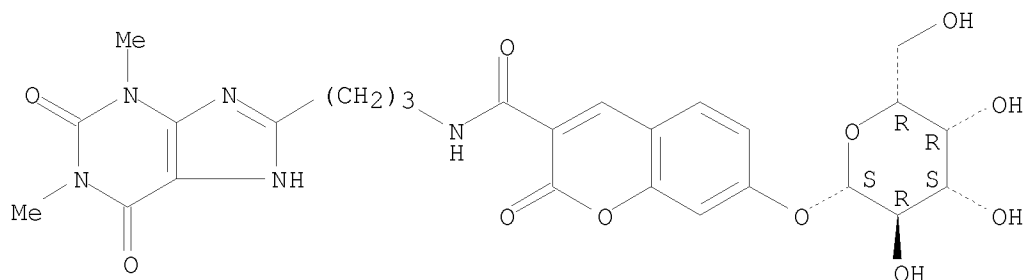
Absolute stereochemistry.



RN 79181-90-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[3-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

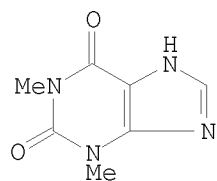


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

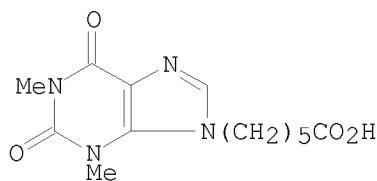
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 244 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1983:416554 CAPLUS  
 DOCUMENT NUMBER: 99:16554  
 ORIGINAL REFERENCE NO.: 99:2545a,2548a  
 TITLE: Enzyme immunoassay of theophylline  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58046072	A	19830317	JP 1982-146984	19820826 <--
JP 02031825	B	19900717		
US 4533493	A	19850806	US 1981-296817	19810827 <--
CA 1210757	A1	19860902	CA 1982-406303	19820629 <--
EP 77896	A1	19830504	EP 1982-107414	19820816 <--
EP 77896	B1	19890125		
R: DE, FR, GB				
US 4460772	A	19840717	US 1983-493632	19830511 <--
US 4608336	A	19860826	US 1983-493609	19830511 <--
PRIORITY APPLN. INFO.:			US 1981-296817 A	19810827
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): CASREACT 99:16554; MARPAT 99:16554				
GI				



I



II

AB Theophylline (I) [58-55-9] is determined in blood by immunochem. methods. I-antigens were prepared for the preparation of antibodies. For example, 9-(5-carboxypentyl)-1,3-dimethylxanthine (II) [86227-48-7] was synthesized and then bound to bovine serum albumin to form an antigen. Procedures for the enzyme immunochem. determination of I are described.

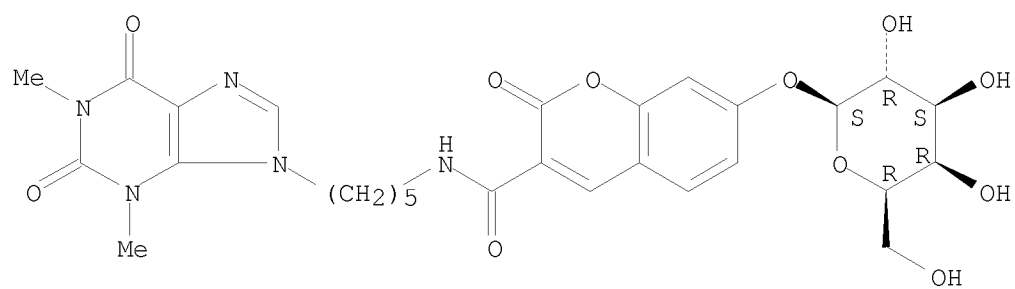
IT 86227-51-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, in enzyme immunoassay of theophylline)

RN 86227-51-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[5-(1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxo-9H-purin-9-yl)pentyl]- (CA INDEX NAME)

Absolute stereochemistry.

10/513699



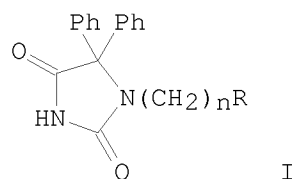
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

10/513699

L9 ANSWER 245 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:160720 CAPLUS  
DOCUMENT NUMBER: 98:160720  
ORIGINAL REFERENCE NO.: 98:24395a,24398a  
TITLE: Diphenylhydantoin derivatives  
INVENTOR(S): Buckler, Robert T.  
PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
SOURCE: Can., 37 pp. Division of Can. Appl. No. 324,409.  
CODEN: CAXXA4  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1137987	A2	19821221	CA 1982-393745	19820107 <--
US 4182856	A	19800108	US 1978-899844	19780425 <--
CA 1121810	A1	19820413	CA 1979-324409	19790329 <--
PRIORITY APPLN. INFO.:			US 1978-899844	A 19780425
			CA 1979-324409	A3 19790329

GI



AB Diphenylhydantoins I (R = amino, CO<sub>2</sub>H; n = 2-6) were prepared as intermediates in the preparation of reagents for detecting diphenylhydantoin and its salts in biol. fluids by binding assays. Thus, 3-carbethoxy-5,5-diphenylhydantoin was treated with N-(4-bromobutyl)phthalimide to give I (R = phthalimido, n = 4). Hydrazinolysis of the latter gave I (R = NH<sub>2</sub> n = 4).

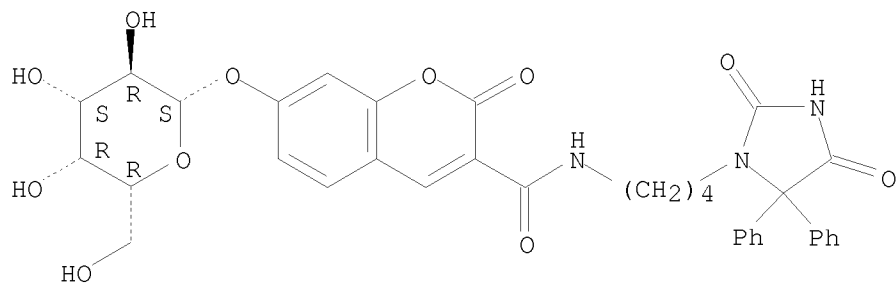
IT 73304-25-3P 73304-29-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for diphenylhydantoin determination)

RN 73304-25-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2,4-dioxo-5,5-diphenyl-1-imidazolidinyl)butyl]-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

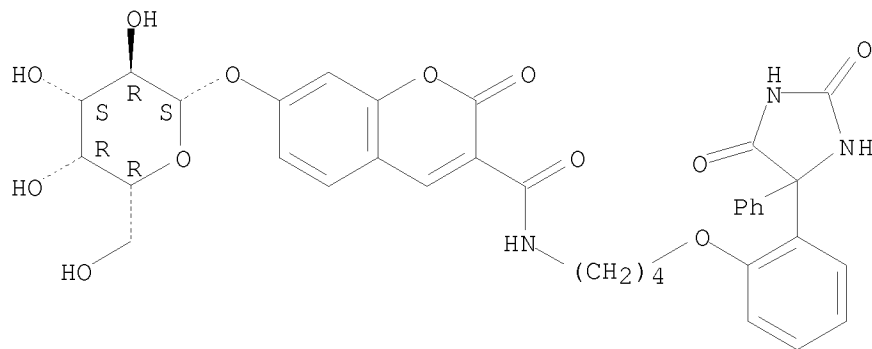
10/513699



RN 73304-29-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[2-(2,5-dioxo-4-phenyl-4-imidazolidinyl)phenoxy]butyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



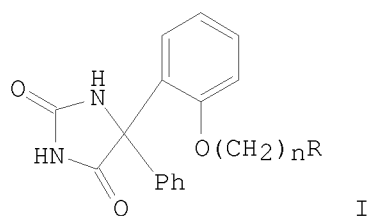


10/513699

L9 ANSWER 246 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:160717 CAPLUS  
DOCUMENT NUMBER: 98:160717  
ORIGINAL REFERENCE NO.: 98:24395a,24398a  
TITLE: Diphenylhydantoin derivatives  
INVENTOR(S): Buckler, Robert T.  
PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
SOURCE: Can., 37 pp. Division of Can. Appl. No. 324,409.  
CODEN: CAXXA4  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1137988	A2	19821221	CA 1982-393746	19820107 <--
US 4182856	A	19800108	US 1978-899844	19780425 <--
CA 1121810	A1	19820413	CA 1979-324409	19790329 <--
PRIORITY APPLN. INFO.:			US 1978-899844	A 19780425
			CA 1979-324409	A3 19790329

GI



AB Hydantoin I (R = amino, CO<sub>2</sub>H; n = 2-6) were prepared as intermediates in the preparation of reagents for detecting diphenylhydantoin and its salts in biol. fluids by binding assays. Thus, 2-HOC<sub>6</sub>H<sub>4</sub>COPh was treated with N-(4-bromobutyl)phthalimide to give 2-(4-phthalimidobutoxy)benzophenone. This was cyclized with KCN and (NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub> to give I (R = NHCHO, n = 4), which was hydrolyzed to give I (R = NH<sub>2</sub>, n = 4).

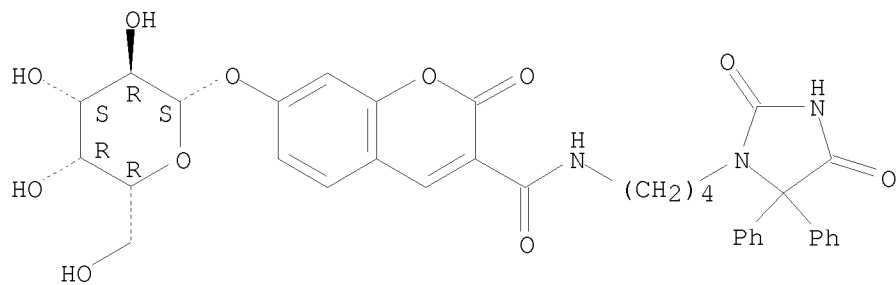
IT 73304-25-3P 73304-29-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for diphenylhydantoin determination)

RN 73304-25-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2,4-dioxo-5,5-diphenyl-1-imidazolidinyl)butyl]-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

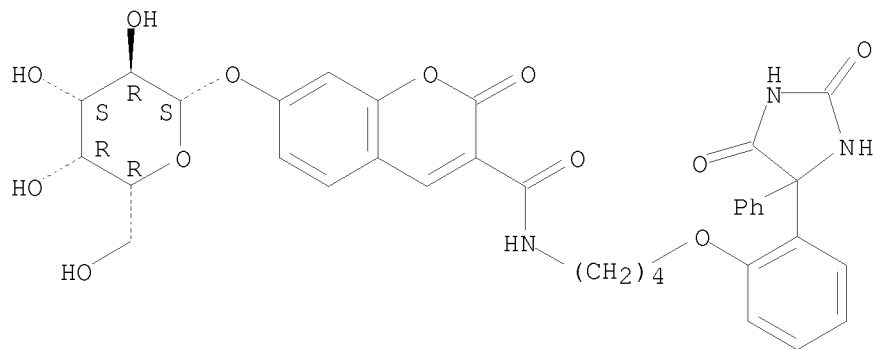
10/513699



RN 73304-29-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[2-(2,5-dioxo-4-phenyl-4-imidazolidinyl)phenoxy]butyl]-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 247 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:157449 CAPLUS  
DOCUMENT NUMBER: 98:157449  
ORIGINAL REFERENCE NO.: 98:23833a,23836a  
TITLE: Multilayer analytical element and its use in  
analytical methods  
INVENTOR(S): Walter, Bert  
PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
SOURCE: Eur. Pat. Appl., 55 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 69281	A1	19830112	EP 1982-105549	19820624 <--
EP 69281	B1	19850925		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4390343	A	19830628	US 1982-369632	19820419 <--
AT 15834	T	19851015	AT 1982-105549	19820624 <--
PRIORITY APPLN. INFO.:			US 1981-280805	A 19810706
			US 1982-369632	A 19820419
			EP 1982-105549	A 19820624

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Multilayer test elements are described for ligand determination or ligand binding

assays which have a reagent layer, a radiation diffusing and blocking layer, and a support layer. The radiation diffusing and blocking layer is interposed between the reagent and support layer, and is both impermeable and inert to the ligand, reagents present in the reagent layer, and products of their interaction. An example is given for a test element for theophylline fluorescence immunoassay. The detection range covered the therapeutic range.

IT 85414-19-3P

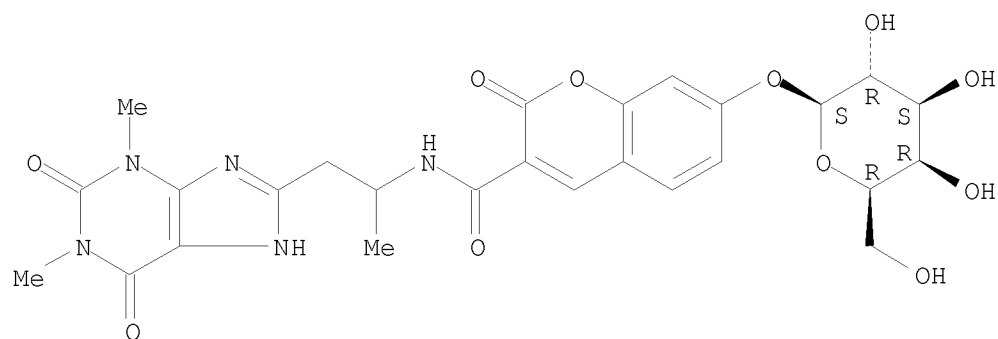
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as label for fluorescence immunoassay of theophylline with multilayer test element)

RN 85414-19-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[1-methyl-2-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)ethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



<12/04/2007>

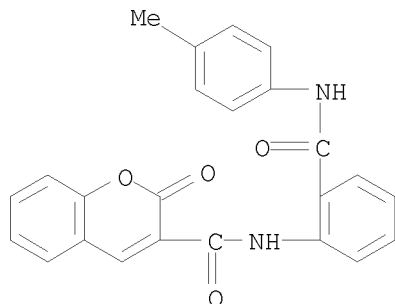
Erich Leese

10/513699

L9 ANSWER 248 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:143349 CAPLUS  
DOCUMENT NUMBER: 98:143349  
ORIGINAL REFERENCE NO.: 98:21841a,21844a  
TITLE: Some reactions of  
3-[2'-(4'H,2',1')-benzoxazin-4'-onyl]coumarins and  
3-(2'-quinazol-4'-onyl)coumarins  
AUTHOR(S): El-Hashash, M. A.; Kaddah, A. M.; El-Kady, M.; Ammer,  
M. M.  
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
SOURCE: Pakistan Journal of Scientific and Industrial Research  
(1982), 25(4), 104-8  
CODEN: PSIRAA; ISSN: 0030-9885  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 98:143349  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

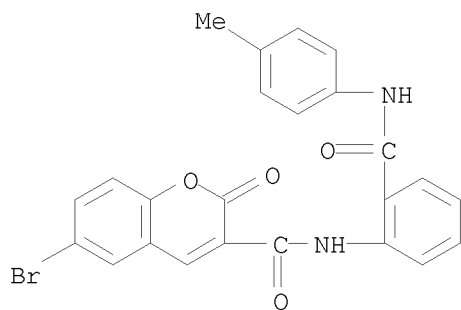
AB Condensation of benzoxazinylcoumarins I (R = H, Br; X = O) with NH<sub>4</sub>OAc or  
HCONH<sub>2</sub> at 190° gave I (X = NH). Treatment of I (R = H, X = NH)  
with BzCl or POCl<sub>3</sub> gave quinazolinylcoumarins II (R<sub>1</sub> = BzO, Cl), and ring  
cleavage of I (X = O) with anilines gave coumarincarboxanilides III (R<sub>2</sub> =  
Me, Cl, CO<sub>2</sub>H). Condensation of I (X = O, NH) with N<sub>2</sub>H<sub>4</sub> gave  
salicylaldehyde azines and the pyrazolinone IV, and Michael addition of I (R  
= H, X = O) with MeCOCH<sub>2</sub>CO<sub>2</sub>Et gave pyranobenzopyrandione V whereas addition  
with MeCOCH<sub>2</sub>COMe gave dihydrocoumarin VI. Cyclocondensation of NaN<sub>3</sub> and I  
(R = H, X = O) gave tetrazole VII.  
IT 73892-26-9P 85226-82-0P 85226-83-1P  
85226-84-2P 85226-85-3P 85226-86-4P  
85226-87-5P 85226-88-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 73892-26-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[4-  
methylphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 85226-82-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-[2-[[4-

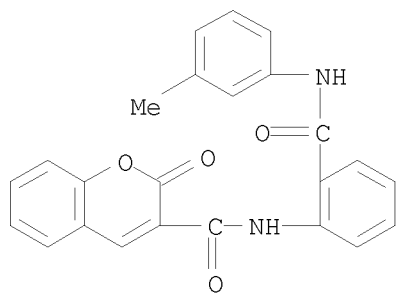
10/513699

methylphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



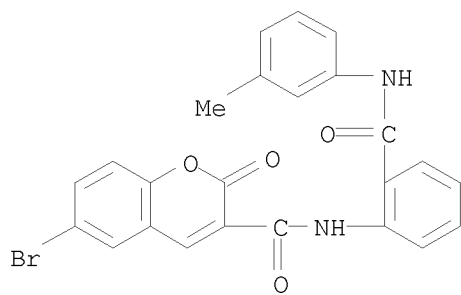
RN 85226-83-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(3-methylphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 85226-84-2 CAPLUS

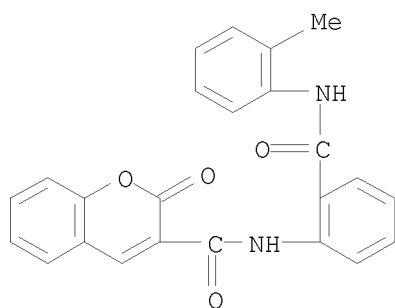
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-[2-[(3-methylphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



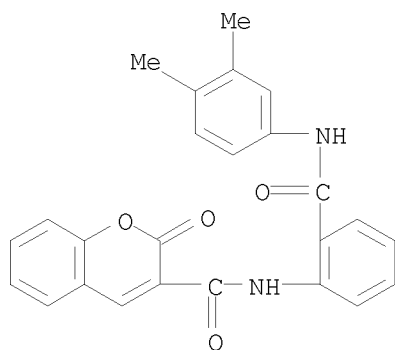
RN 85226-85-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(2-methylphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)

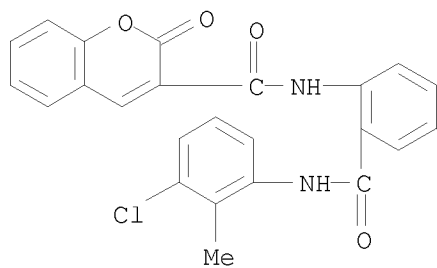
10/513699



RN 85226-86-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[3,4-dimethylphenyl]amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)

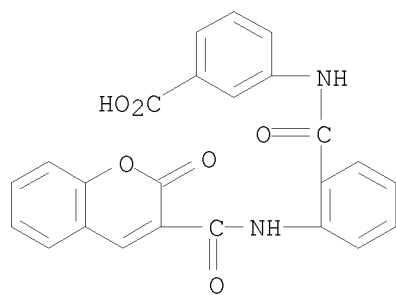


RN 85226-87-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[3-chloro-2-methylphenyl]amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 85226-88-6 CAPLUS  
CN Benzoic acid, 3-[[2-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]benzoyl]amino]- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 10

THERE ARE 10 CAPLUS RECORDS THAT CITE THIS  
RECORD (10 CITINGS)



L9 ANSWER 249 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1983:125757 CAPLUS

DOCUMENT NUMBER: 98:125757

ORIGINAL REFERENCE NO.: 98:19151a,19154a

TITLE: Penicillin and cephalosporin compounds and  
antibacterial composition containing the compoundsINVENTOR(S): Machida, Yoshimasa; Saito, Isao; Sugiyama, Isao; Negi,  
Shigeto; Nomoto, Seiichiro; Ikuta, Hironori; Yamauchi,  
Hiroshi; Kitoh, Kyosuke

PATENT ASSIGNEE(S): Eisai Co., Ltd. , Japan

SOURCE: Eur. Pat. Appl., 67 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

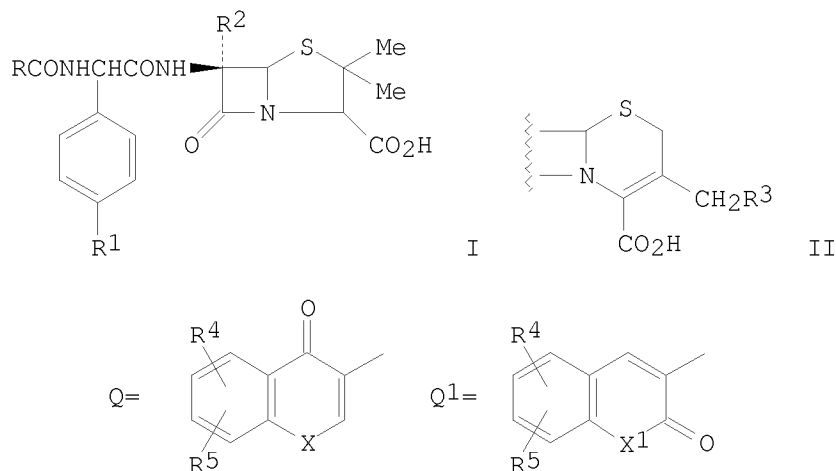
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 62328	A2	19821013	EP 1982-102830	19820402 <--
EP 62328	A3	19831116		
R: BE, CH, DE, FR, GB, IT, NL, SE				
JP 57165389	A	19821012	JP 1981-48437	19810402 <--
JP 57165390	A	19821012	JP 1981-48438	19810402 <--
US 4468394	A	19840828	US 1982-363778	19820331 <--
PRIORITY APPLN. INFO.:			JP 1981-48437	A 19810402
			JP 1981-48438	A 19810402

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 98:125757; MARPAT 98:125757

GI



AB Lactams I and II (R = Q, Q<sup>1</sup>; R<sup>1</sup> = H, OH; R<sup>2</sup> = H, OMe; R<sup>3</sup> = acyloxy, heterocyclylthio; R<sup>4</sup>, R<sup>5</sup> = OH, acyloxy; X = S, NH, alkylimino; X<sup>1</sup> = O, S, NH, alkylimino) were prepared Thus, ampicillin was acylated with QCOC<sub>1</sub> (X =

10/513699

NEt, R4 = 6-OAc, R5 = 7-OAc) to give I (R = Q, R1 = R2 = H, R4 = 6-OAc, R5 = 7-OAc, X = NEt) which had a min. inhibitory concentration against *Pseudomonas aeruginosa* of 1.56 µg/mL.

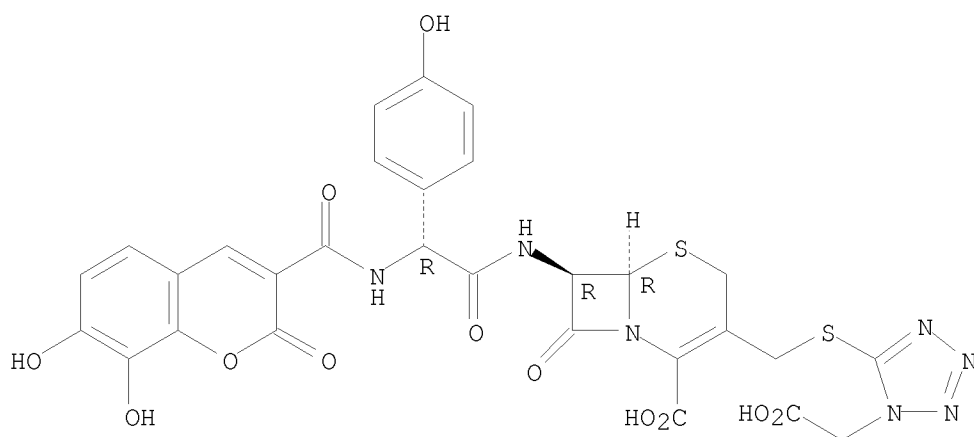
IT 84738-46-5P 84750-75-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 84738-46-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[1-(carboxymethyl)-1H-tetrazol-5-yl]thio]methyl]-7-[[[(7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-8-oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (R\*)]]- (9CI) (CA INDEX NAME)

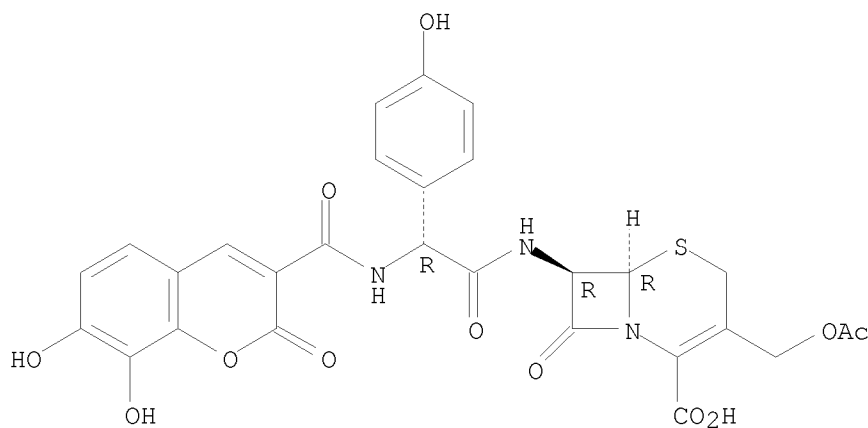
Absolute stereochemistry.



RN 84750-75-4 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-8-oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



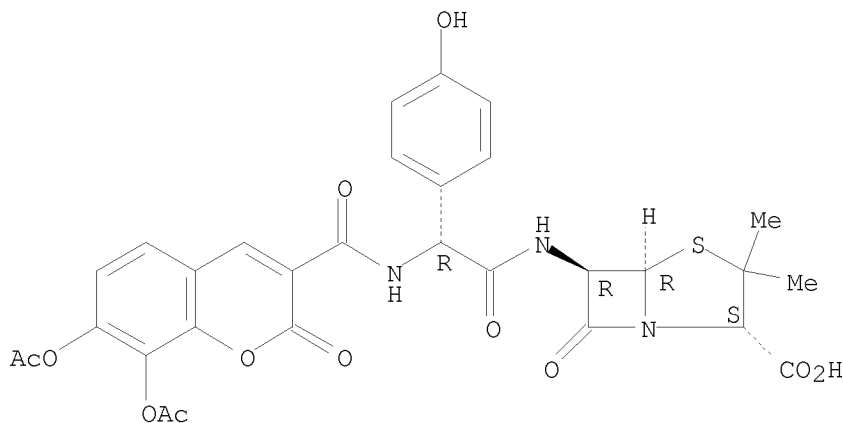
<12/04/2007>

Erich Leese

10/513699

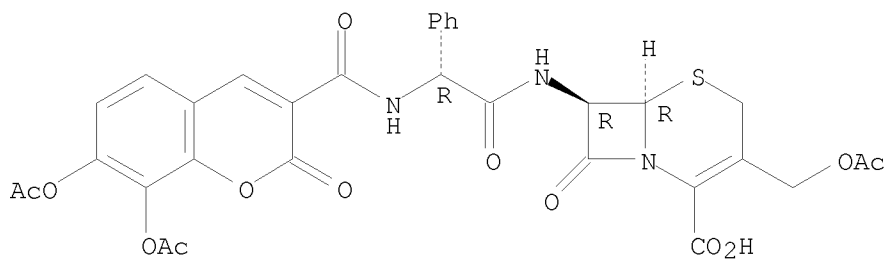
IT 84738-43-2P 84738-44-3P 84738-45-4P  
84738-47-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 84738-43-2 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[7,8-bis(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino](4-  
hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 84738-44-3 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[[[7,8-bis(acetyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (R\*)]]-  
(9CI) (CA INDEX NAME)

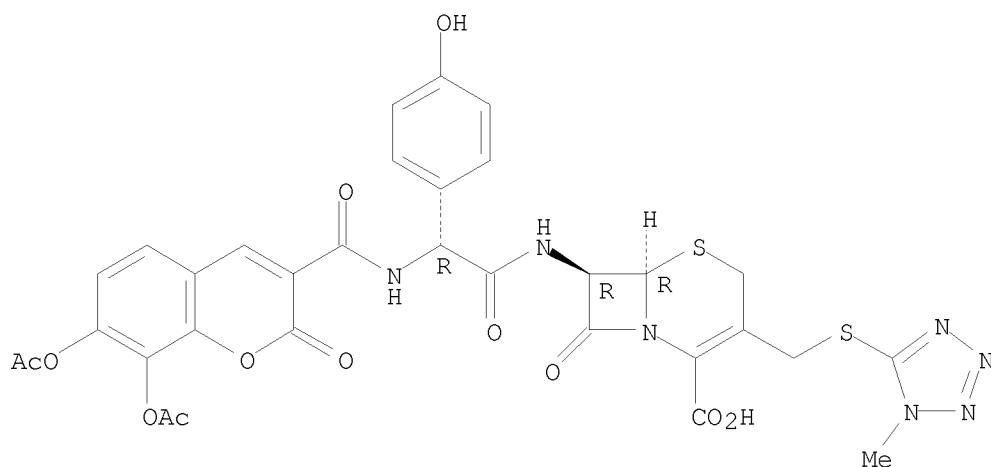
Absolute stereochemistry.



RN 84738-45-4 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[[[7,8-bis(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino](4-  
hydroxyphenyl)acetyl]amino]-3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-  
oxo-, [6R-[6 $\alpha$ ,7 $\beta$ (R\*)]]- (9CI) (CA INDEX NAME)

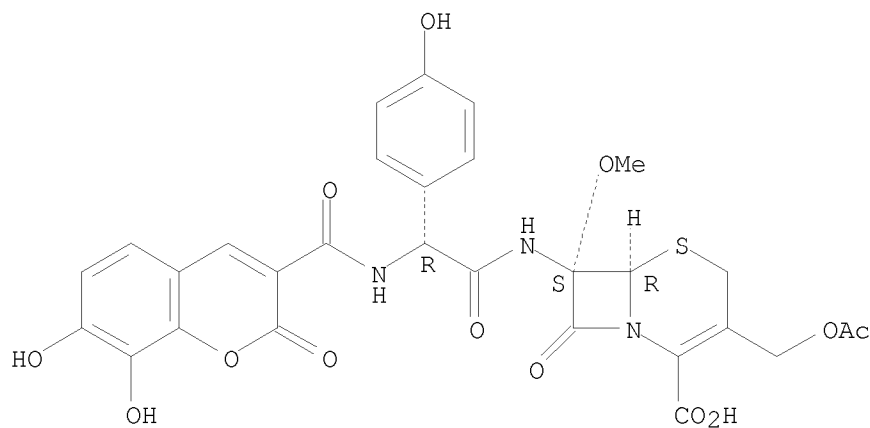
Absolute stereochemistry.

10/513699



RN 84738-47-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(7,8-dihydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-7-methoxy-8-oxo-,  
[6R-[6 $\alpha$ ,7 $\alpha$ ,7(R\*)]]- (9CI) (CA INDEX NAME)

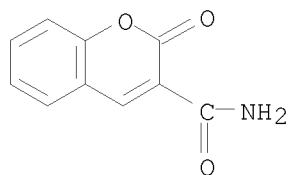
Absolute stereochemistry.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 250 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1983:89122 CAPLUS  
DOCUMENT NUMBER: 98:89122  
ORIGINAL REFERENCE NO.: 98:13595a,13598a  
TITLE: The reaction between azomethines and carbon suboxide  
AUTHOR(S): Boulton, A. J.  
CORPORATE SOURCE: Sch. Chem. Sci., Univ. East Anglia, Norwich, NR4 8TJ,  
UK  
SOURCE: Journal of the Chemical Society, Chemical  
Communications (1982), (22), 1328  
CODEN: JCCCAT; ISSN: 0022-4936  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 98:89122  
AB A polemic. The cyclocondensation reaction of salicylideneamines with C3O2  
gives 2H-1-benzopyran-2-one-3-carboxamides and not 1,5-benzoxazocines as  
reported by L. Bonsignore et al. (1982). The proposal is based on  
comparison of literature m.p. values of the benzopyranonecarboxamides with  
those reported by B. et al. for 1,5-benzoxazocines.  
IT 1846-78-2DP, N-substituted derivs.  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, by cyclocondensation reaction of carbon suboxide with  
salicylideneamines)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)

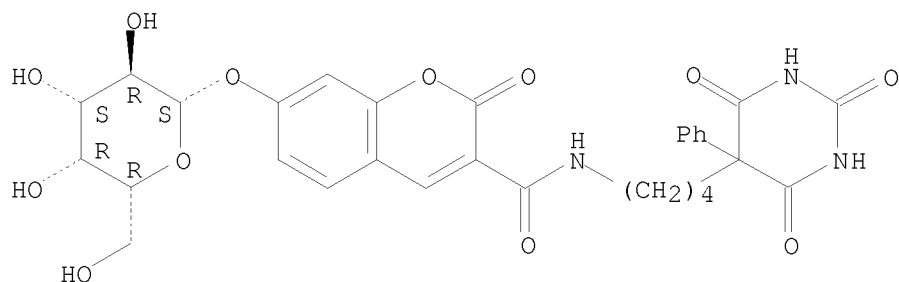


L9 ANSWER 251 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1983:85788 CAPLUS  
 DOCUMENT NUMBER: 98:85788  
 ORIGINAL REFERENCE NO.: 98:13053a,13056a  
 TITLE: Multilayer analytical element having an impermeable radiation nondiffusing reflecting layer  
 INVENTOR(S): Greenquist, Alfred C.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA  
 SOURCE: U.S., 14 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4363874	A	19821214	US 1981-290938	19810807 <--
CA 1178535	A1	19841127	CA 1982-401588	19820423 <--
PRIORITY APPLN. INFO.:			US 1981-290938	A 19810807

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 OTHER SOURCE(S): MARPAT 98:85788  
 AB Multilayered test element for ligand immunoassays are described which possess the following improvements: (1) a reagent layer containing an antibody, ligand conjugate, and a detection system, (2) a solid carrier incorporated with these reagents and (3) a radiation reflecting layer which is interposed between the reagent layer and the support layer, and which is impermeable and inert to ligands, reagents, and their reaction products. A test element was prepared for phenobarbital immunoassay which contains  $\beta$ -galactosyl-coumarin-phenobarbital conjugate, phenobarbital antiserum, and  $\beta$ -galactosidase. Introduction of a Mylar backing reduced background fluorescence and increased fluorescence due to product generation.  
 IT 79181-95-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for phenylbarbital immunoassay)  
 RN 79181-95-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-N-[4-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)butyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



IT 79181-90-1P 80475-50-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)

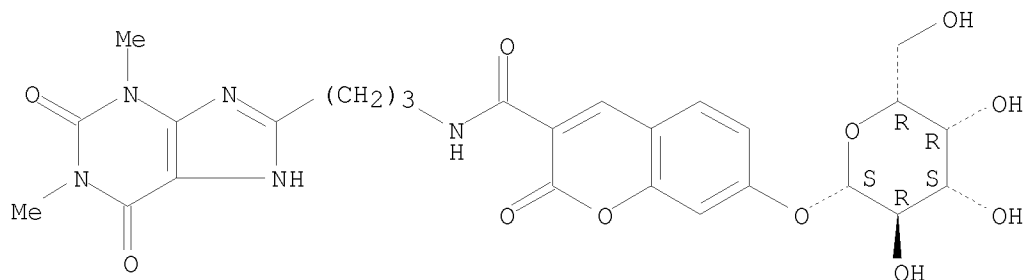
10/513699

(preparation of, for theophylline immunoassay)

RN 79181-90-1 CAPLUS

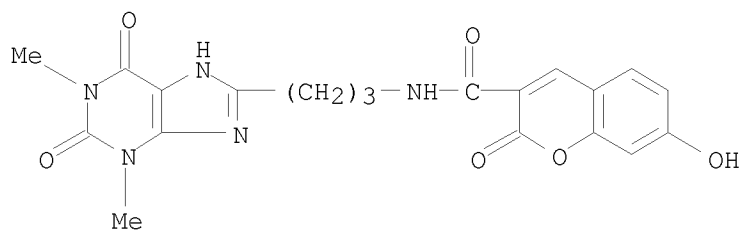
CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-N-[3-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



RN 80475-50-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-2-oxo-N-[3-(2,3,6,9-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (CA INDEX NAME)



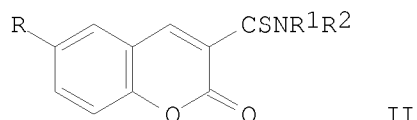
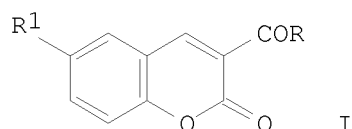
OS.CITING REF COUNT: 19

THERE ARE 19 CAPLUS RECORDS THAT CITE THIS  
RECORD (19 CITINGS)

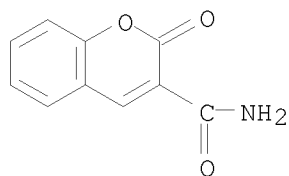
REFERENCE COUNT: 11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 252 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:544730 CAPLUS  
 DOCUMENT NUMBER: 97:144730  
 ORIGINAL REFERENCE NO.: 97:24101a,24104a  
 TITLE: Studies of unsaturated lactones. LI. Some chemical transformations of functionally substituted coumarins  
 AUTHOR(S): Avetisyan, A. A.; Vanyan, E. V.; Dangyan, M. T.  
 CORPORATE SOURCE: Erevan. Gos. Univ., Yerevan, USSR  
 SOURCE: Armyanskii Khimicheskii Zhurnal (1982), 35(5), 319-22  
 CODEN: AYKZAN; ISSN: 0515-9628  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 97:144730  
 GI



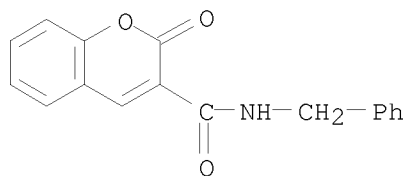
AB Nitration of I (R = OH, OEt, NH<sub>2</sub>; R<sub>1</sub> = H) gave the corresponding I (R<sub>1</sub> = NO<sub>2</sub>). I (R = OH; R<sub>1</sub> = H, NO<sub>2</sub>) were converted, via the acid chlorides, into amides, which with P2S5 gave six II (R = H, NO<sub>2</sub>; R<sub>1</sub>, R<sub>2</sub> = H, H; Et, Et; H, PhCH<sub>2</sub>).  
 IT 1846-78-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (nitration of)  
 RN 1846-78-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



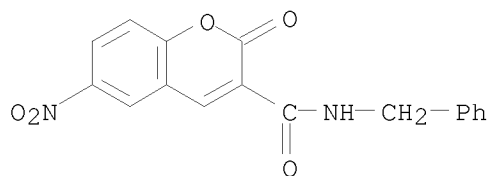
IT 1846-90-8P 83090-98-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and conversion into thioamide)  
 RN 1846-90-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



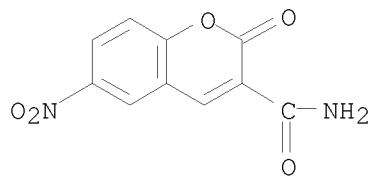
10/513699



RN 83090-98-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



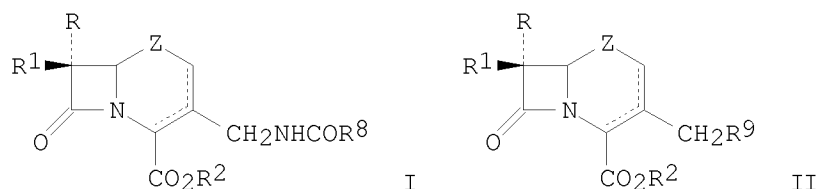
IT 83090-96-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 83090-96-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 253 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:527399 CAPLUS  
 DOCUMENT NUMBER: 97:127399  
 ORIGINAL REFERENCE NO.: 97:21141a,21144a  
 TITLE: 7-[(Un)substituted amino]-3-(substituted  
 methyl)cephemcarboxylic acids  
 PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57064699	A	19820419	JP 1980-139351	19801007 <--
JP 01061113	B	19891227		
PRIORITY APPLN. INFO.:			JP 1980-139351	19801007
OTHER SOURCE(S):		CASREACT 97:127399		
GI				



AB Twenty-seven title compds. I [R = H, alkoxy; R1 = NH2, R3R4C:CR5NH (R3, R4, R5 = H, inert organic residues), R6R7C:N (R6, R7 = H, inert organic residues); R2 = H, CO2H-protecting groups; R8CO = acyl; Z = S, SO] were prepared by reaction of II (R9 = acyloxy, H2NCO2) with R8CN in the presence of acids followed by treatment with H2O. Thus, reaction of 2.72 g 7-aminocephalosporanic acid, 15 mL MeCN, and 5.68 g BF3.Et2O 5 h at room temperature, concentration, dissoln. of the residue in 50% aqueous Me2CO, and adjustment at pH 3.5 with 28% aqueous NH3 with ice cooling gave 79% 7-amino-3-acetylaminomethyl-Δ3-cephem-4-carboxylic acid (III). Addition of 4 g Ph2CN2 to a mixture of 2.71 g III and 1.9 g 4-MeC6H4SO3H.H2O in MeOH at room temperature and reaction 30 min gave 65% benzhydryl 7-amino-3-acetylaminomethyl-Δ3-cephem-4-carboxylate.

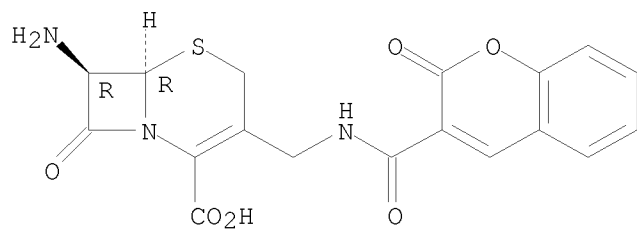
IT 80717-95-9P 80734-13-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 80717-95-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-amino-8-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-,  
 (6R-trans)- (9CI) (CA INDEX NAME)

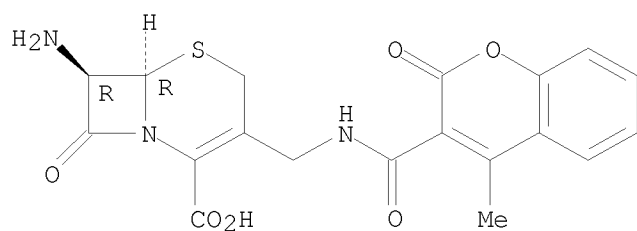
Absolute stereochemistry.

10/513699

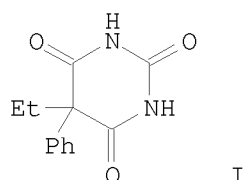


RN 80734-13-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-3-[[[(4-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-8-  
oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 254 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:519988 CAPLUS  
 DOCUMENT NUMBER: 97:119988  
 ORIGINAL REFERENCE NO.: 97:19745a,19748a  
 TITLE: Substrate-labeled fluorescent immunoassay for  
 phenobarbital  
 AUTHOR(S): Krausz, Leon M.; Hitz, John B.; Buckler, Robert T.;  
 Burd, John F.  
 CORPORATE SOURCE: Ames Res. Dev. Immunochem. Lab., Miles Lab., Inc.,  
 Elkhart, IN, USA  
 SOURCE: Therapeutic Drug Monitoring (1980), 2(3),  
 261-72  
 CODEN: TDMODV; ISSN: 0163-4356  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB An assay for the anticonvulsant drug phenobarbital (PB) (I) [50-06-6] was developed that is based on the principles of substrate-labeled fluorescent immunoassay. A fluorogenic enzyme substrate, galactosyl umbelliferone, was covalently linked to a derivative of PB. The labeled drug, galactosyl umbelliferone-PB (GUPB) [79181-95-6], was synthesized and is nonfluorescent under conditions of the assay; however, hydrolysis of the galactosyl moiety by bacterial  $\beta$ -galactosidase yields a fluorescent product. When GUPB is bound by antibody to PB, it is not a substrate for enzymic hydrolysis. Thus, only GUPB not bound to antibody is hydrolyzed. In competitive binding reactions, using a fixed concentration of GUPB and a limiting amount of antibody, the PB in serum and the GUPB compete for antibody-binding sites. The fluorescence produced upon enzymic hydrolysis of unbound GUPB is directly proportional to the concentration of PB. Unknown serum levels of PB are determined from a standard curve of fluorescent intensity vs. standard PB concns. The assay is specific, sensitive, and easy to perform. It is carried out by adding the equivalent of 2  $\mu$ L of serum standard or unknown directly to a cuvette containing 3 mL of a buffered solution of antibody and enzyme. One-hundred microliters of GUPB is added, and the fluorescence intensity is measured after a fixed time (any time from 5 to 90 min). Using clin. specimens, the assay correlated well with a com. enzyme immunoassay (correlation coefficient = 0.97) and had an interassay precision of less than 7%.

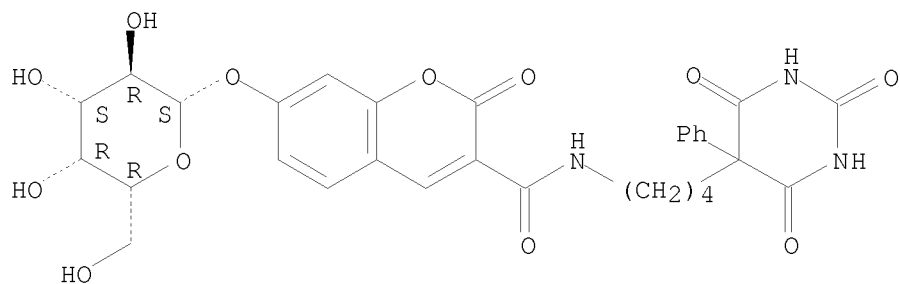
IT 79181-95-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for fluorescent immunoassay of phenobarbital in human blood)

RN 79181-95-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-( $\beta$ -D-galactopyranosyloxy)-N-[4-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)butyl]-2-oxo- (CA INDEX

10/513699

NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 255 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1982:492085 CAPLUS

DOCUMENT NUMBER: 97:92085

ORIGINAL REFERENCE NO.: 97:15351a,15354a

TITLE: Some new coumarins and Schiff's bases as possible antibacterial and antifungal agents

AUTHOR(S): Mittal, A. K.; Singhal, O. P.

CORPORATE SOURCE: Chem. Dep., St. John's Coll., Agra, India

SOURCE: Journal of the Indian Chemical Society (1982), 59(3), 373-4

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 97:92085

AB Some new coumarin-3-carboxanilides and 2-hydroxybenzylidene anilines have been prepared by condensing different substituted malonanilic acids with salicylaldehydes using different condensing agents. Some of the prepared compds. were screened for antibacterial and antifungal activity and showed some tuberculostatic activity.

IT 74556-01-7P 74556-02-8P 82607-32-7P

82607-34-9P 82607-37-2P 82607-38-3P

82607-88-3P 82607-90-7P 82607-93-0P

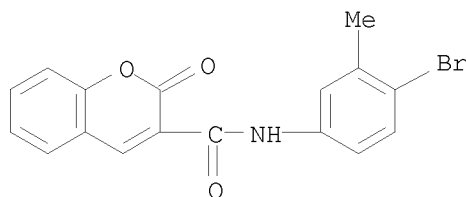
82607-94-1P 82607-95-2P 82607-97-4P

82608-00-2P 82608-01-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

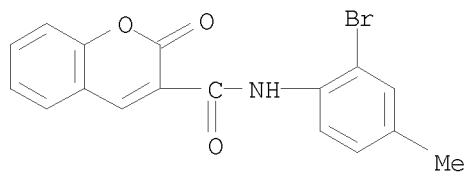
RN 74556-01-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-3-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 74556-02-8 CAPLUS

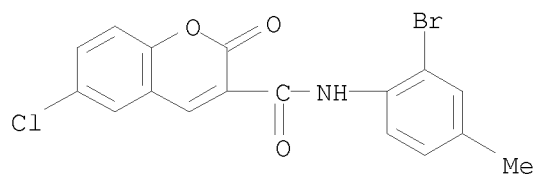
CN 2H-1-Benzopyran-3-carboxamide, N-(2-bromo-4-methylphenyl)-2-oxo- (CA INDEX NAME)



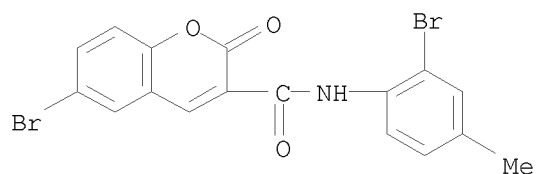
RN 82607-32-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-bromo-4-methylphenyl)-6-chloro-2-oxo- (CA INDEX NAME)

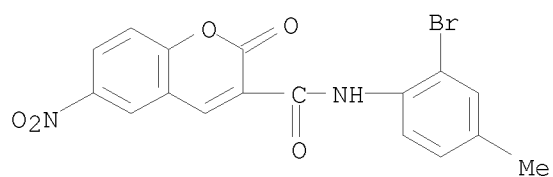
10/513699



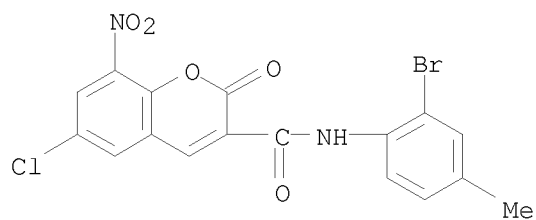
RN 82607-34-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-bromo-4-methylphenyl)-2-oxo-  
(CA INDEX NAME)



RN 82607-37-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-bromo-4-methylphenyl)-6-nitro-2-oxo-  
(CA INDEX NAME)

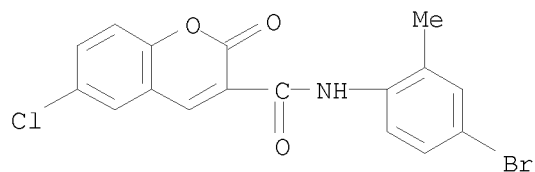


RN 82607-38-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-bromo-4-methylphenyl)-6-chloro-8-nitro-  
2-oxo- (CA INDEX NAME)

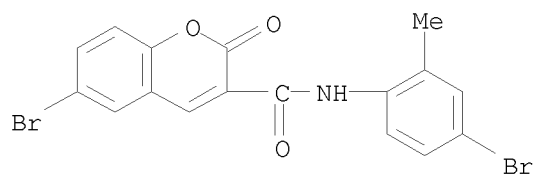


RN 82607-88-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-2-methylphenyl)-6-chloro-2-oxo-  
(CA INDEX NAME)

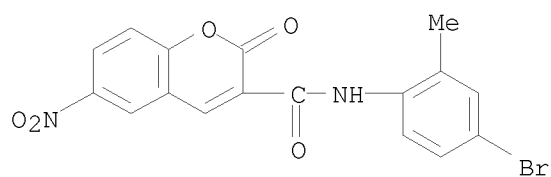
10/513699



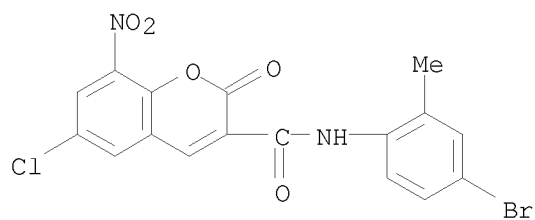
RN 82607-90-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-bromo-2-methylphenyl)-2-oxo-  
(CA INDEX NAME)



RN 82607-93-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-2-methylphenyl)-6-nitro-2-oxo-  
(CA INDEX NAME)



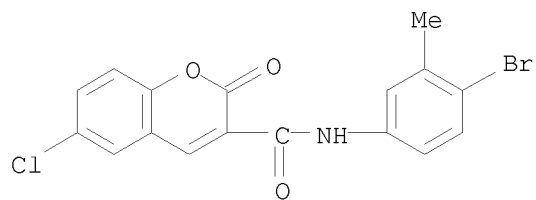
RN 82607-94-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-2-methylphenyl)-6-chloro-8-nitro-  
2-oxo- (CA INDEX NAME)



RN 82607-95-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-3-methylphenyl)-6-chloro-2-oxo-  
(CA INDEX NAME)

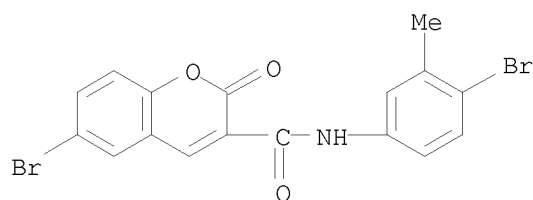


10/513699



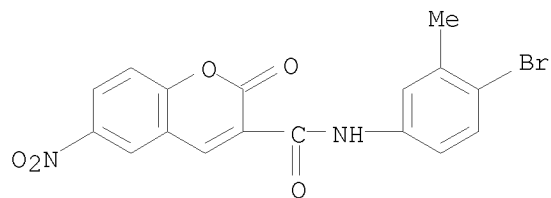
RN 82607-97-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-bromo-3-methylphenyl)-2-oxo-  
(CA INDEX NAME)



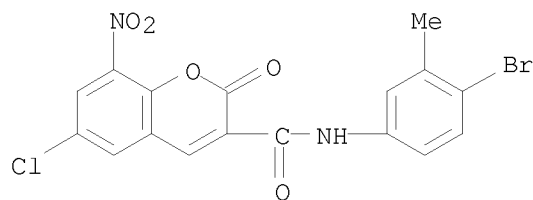
RN 82608-00-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-3-methylphenyl)-6-nitro-2-oxo-  
(CA INDEX NAME)



RN 82608-01-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-3-methylphenyl)-6-chloro-8-nitro-  
2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 6

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 256 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:472184 CAPLUS  
 DOCUMENT NUMBER: 97:72184  
 ORIGINAL REFERENCE NO.: 97:12077a,12080a  
 TITLE: Cephalosporins and their intermediates  
 INVENTOR(S): Sadaki, Horishi; Narita, Hirokazu; Imaizumi, Hiroyuki;  
 Konishi, Yoshinori; Inaba, Takihiro; Hirakawa, Tatsuo;  
 Taki, Hideo; Tai, Masaru; Watanabe, Yasuo; Saikawa,  
 Isamu  
 PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd. , Japan  
 SOURCE: Ger. Offen., 277 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 3137854	A1	19820415	DE 1981-3137854	19810923 <--
DE 3137854	C2	19870619		
JP 57058689	A	19820408	JP 1980-132253	19800925 <--
JP 62010512	B	19870306		
JP 57082393	A	19820522	JP 1980-158184	19801112 <--
JP 62010995	B	19870310		
JP 57099592	A	19820621	JP 1980-175263	19801213 <--
JP 60052755	B	19851121		
GB 2089339	A	19820623	GB 1981-28011	19810916 <--
GB 2089339	B	19850424		
CA 1204735	A1	19860520	CA 1981-386066	19810916 <--
AU 8175438	A	19820401	AU 1981-75438	19810917 <--
AU 550330	B2	19860320		
IN 155375	A1	19850119	IN 1981-CA1045	19810919 <--
IL 63892	A	19860831	IL 1981-63892	19810920 <--
IL 74413	A	19860831	IL 1981-74413	19810920 <--
IL 74414	A	19860831	IL 1981-74414	19810920 <--
IL 74415	A	19860831	IL 1981-74415	19810920 <--
IL 76348	A	19860831	IL 1981-76348	19810920 <--
ZA 8106576	A	19820929	ZA 1981-6576	19810922 <--
NL 8104386	A	19820416	NL 1981-4386	19810923 <--
US 4489072	A	19841218	US 1981-304912	19810923 <--
PL 135446	B1	19851031	PL 1981-233143	19810923 <--
PL 135611	B1	19851130	PL 1981-238230	19810923 <--
PL 137674	B1	19860731	PL 1981-238228	19810923 <--
DE 3152931	C2	19891005	DE 1981-3152931	19810923 <--
DE 3152934	C2	19900118	DE 1981-3152934	19810923 <--
DE 3152932	C2	19900208	DE 1981-3152932	19810923 <--
DE 3152935	C2	19920716	DE 1981-3152935	19810923 <--
FI 8102980	A	19820326	FI 1981-2980	19810924 <--
FI 75575	B	19880331		
FI 75575	C	19880711		
NO 8103252	A	19820326	NO 1981-3252	19810924 <--
NO 161117	B	19890328		
NO 161117	C	19890705		
DK 8104218	A	19820415	DK 1981-4218	19810924 <--
DK 163877	B	19920413		
DK 163877	C	19920914		

SE 8105658	A	19820505	SE 1981-5658	19810924 <--
SE 453090	B	19880111		
SE 453090	C	19880421		
HU 27162	A2	19831028	HU 1981-2759	19810924 <--
HU 185850	B	19850428		
AT 8104109	A	19831115	AT 1981-4109	19810924 <--
AT 375082	B	19840625		
HU 30035	A2	19840228	HU 1983-1798	19810924 <--
HU 188021	B	19860328		
CS 236471	B2	19850515	CS 1981-7055	19810924 <--
SU 1190987	A3	19851107	SU 1981-3340952	19810924 <--
BE 890499	A1	19820325	BE 1981-206067	19810925 <--
FR 2509310	A1	19830114	FR 1981-18156	19810925 <--
FR 2509310	B1	19850802		
DD 202436	A5	19830914	DD 1981-233599	19810925 <--
RO 82689	A1	19831101	RO 1981-105405	19810925 <--
DD 208351	A5	19840502	DD 1981-247292	19810925 <--
RO 86823	B3	19850520	RO 1981-112111	19810925 <--
RO 86824	B3	19850520	RO 1981-112112	19810925 <--
RO 86825	B3	19850520	RO 1981-112113	19810925 <--
FR 2511377	A1	19830218	FR 1982-15992	19820922 <--
FR 2511377	B1	19851213		
FR 2511373	A1	19830218	FR 1982-15994	19820922 <--
FR 2511373	B1	19851213		
FR 2511374	A1	19830218	FR 1982-15995	19820922 <--
FR 2511374	B1	19850809		
FR 2533216	A1	19840323	FR 1982-15993	19820922 <--
FR 2533216	B1	19850329		
CS 236491	B2	19850515	CS 1982-7529	19821022 <--
CS 236492	B2	19850515	CS 1982-7530	19821022 <--
CS 236493	B2	19850515	CS 1982-7531	19821022 <--
SU 1249017	A1	19860807	SU 1982-3529508	19821209 <--
SU 1274625	A3	19861130	SU 1982-3523100	19821209 <--
SU 1308198	A3	19870430	SU 1982-3520352	19821209 <--
SU 1318144	A3	19870615	SU 1982-3521951	19821209 <--
SU 1418329	A1	19880823	SU 1982-3520351	19821209 <--
AT 8300556	A	19841115	AT 1983-556	19830218 <--
AT 378193	B	19850625		
AT 8300554	A	19850315	AT 1983-554	19830218 <--
AT 378961	B	19851025		
AT 8300555	A	19850315	AT 1983-555	19830218 <--
AT 378962	B	19851025		
SU 1350166	A1	19871107	SU 1983-3635254	19830824 <--
CA 1200541	A2	19860211	CA 1983-435930	19830901 <--
GB 2135304	A	19840830	GB 1984-2249	19840127 <--
GB 2135304	B	19850327		
GB 2136420	A	19840919	GB 1984-2250	19840127 <--
GB 2136420	B	19850501		
IN 158589	A1	19861213	IN 1984-CA601	19840829 <--
IN 158590	A1	19861213	IN 1984-CA602	19840829 <--
IN 159126	A1	19870328	IN 1984-CA603	19840829 <--
US 4673738	A	19870616	US 1984-654681	19840926 <--
AU 8549860	A	19860320	AU 1985-49860	19851113 <--
AU 558586	B2	19870205		
AU 8549861	A	19860320	AU 1985-49861	19851113 <--
AU 568033	B2	19871210		
AU 8549863	A	19860320	AU 1985-49863	19851113 <--

10/513699

AU 558669	B2	19870205		
AU 8549862	A	19860424	AU 1985-49862	19851113 <--
AU 558649	B2	19870205		
SE 8600192	A	19860116	SE 1986-192	19860116 <--
SE 468478	B	19930125		
SE 468478	C	19930519		
SE 8600193	A	19860116	SE 1986-193	19860116 <--
SE 468479	B	19930125		
SE 468479	C	19930519		
SE 8600194	A	19860116	SE 1986-194	19860116 <--
SE 468476	B	19930125		
SE 468476	C	19930519		
SE 8600195	A	19860116	SE 1986-195	19860116 <--
SE 468477	B	19930125		
SE 468477	C	19930519		
FI 8700153	A	19870115	FI 1987-153	19870115 <--
FI 80041	B	19891229		
FI 80041	C	19900410		
US 4879381	A	19891107	US 1987-22433	19870306 <--
US 5144027	A	19920901	US 1991-707221	19910524 <--

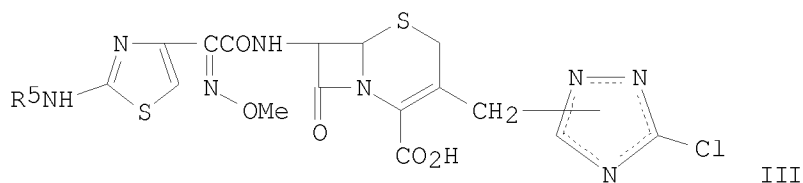
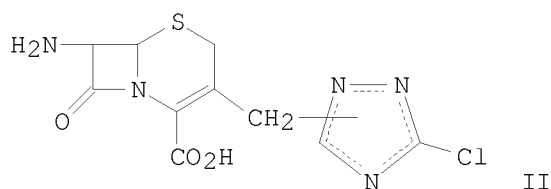
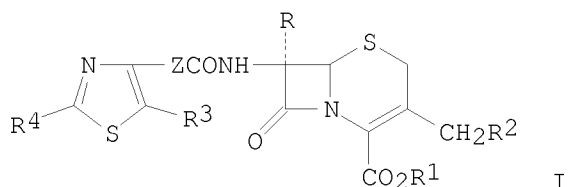
PRIORITY APPLN. INFO.:

JP 1980-132253	A	19800925
JP 1980-158184	A	19801112
JP 1980-175263	A	19801213
CA 1981-386066	A3	19810916
GB 1981-28011	A3	19810916
IN 1981-CA1045	A1	19810919
IL 1981-63892	A	19810920
US 1981-304912	A3	19810923
AT 1981-4109	A	19810924
CS 1981-7055	A3	19810924
FI 1981-2980	A	19810924
US 1984-654681	A3	19840926
IL 1985-74415	A	19850221
US 1987-22432	B3	19870306

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 97:72184; MARPAT 97:72184

GI



AB Cephalosporin analogs I [R = H, alkoxy; R1 = H, carboxy protective group; R2 = (un)substituted aryl, acylamino, aromatic C-bonded heterocyclyl, N-bonded triazolyl, tetrazolyl; R3 = H, halo; R4 = H, NH2 optionally protected or substituted; Z = CH2, C(:NOR5) (R5 = H, alkyl)], useful as antibiotics stable to lactamase-producing bacteria and having low toxicity, were prepared. Extensive antibacterial activity data for 14 compds. were tabulated. Thus, treating 7-aminocephalosporanic acid with 3-chloro-1,2,4-triazole in sulfolane containing BF3.Et2O gave triazolylmethylcephem II which in CH2Cl2 was trimethylsilylated and N-acylated with 2-(2-tert-amyloxycarboxamido-4-thiazolyl)-2-syn-methoxyiminoacetic acid and POCl3 in DMF to give 91.8% III (R5 = EtCMe2O2C). This was hydrolyzed with F3CCO2H to give III (R5 = H).F3CCO2H, which had min. inhibitory concentration of 0.39 µg/mL against *Escherichia coli* vs. 25 for cephalosporin.

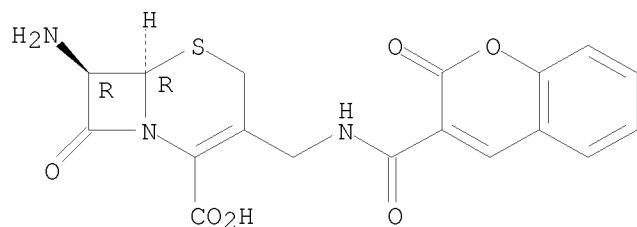
IT 80717-95-9P 80734-13-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 80717-95-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-8-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

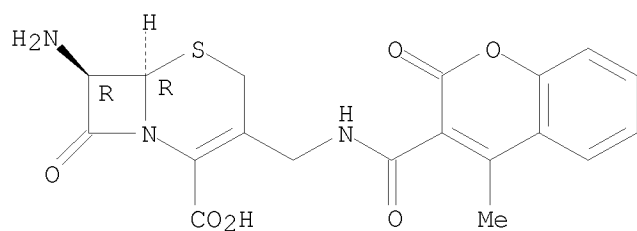
10/513699



RN 80734-13-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-3-[[[(4-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-8-  
oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

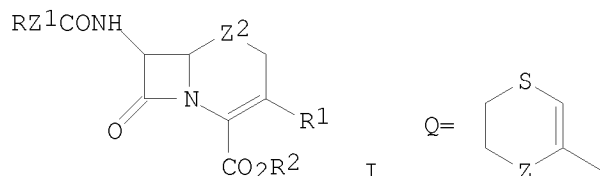
Absolute stereochemistry.



OS.CITING REF COUNT:	4	THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT:	4	THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 257 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:472181 CAPLUS  
 DOCUMENT NUMBER: 97:72181  
 ORIGINAL REFERENCE NO.: 97:12073a,12076a  
 TITLE: New  $\beta$ -lactam antibiotics  
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

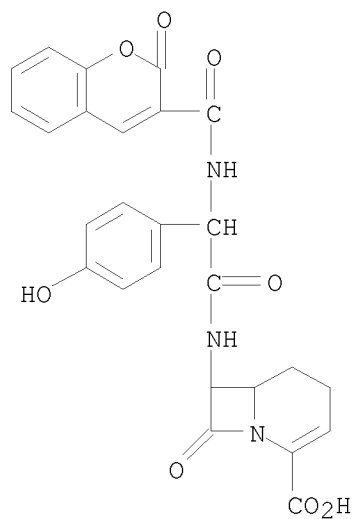
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57009782	A	19820119	JP 1980-82839	19800620 <--
PRIORITY APPLN. INFO.: GI			JP 1980-82839	A 19800620



AB Twenty-seven new  $\beta$ -lactams I [R = Q (Z = S, O, NCHO), HOC6H4, 2-imino-4-oxo-5-thiazolidinyl, aminothiazolyl, etc.; R1 = H, CH2OAc, (1-methyl-1H-tetrazol-5-yl)thiomethyl; R2 = H, protecting group; Z1 = CHNHR3 (R3 = H, coumarin-3-carbonyl, 2-oxo-2H-pyran-5-ylcarbonyl, etc.; Z2 = CH2, S] were prepared and the min. inhibition concns. given against 8 bacteria strains. Thus, 94 mg coumarin-3-carbonyl chloride in Me2CO was added to an aqueous mixture of 100 mg ( $\pm$ )-cis-7 $\beta$ -[(R)-2-(p-hydroxyphenyl)-2-aminoacetamido]-2-carboxy-1-azabicyclo[4.2.0]oct-2-en-8-one.F3CCO2H and 113 mg NaHCO3 at 0-3° and the mixture stirred 1 h at 5-10° to give 47.5% ( $\pm$ )-cis-7 $\beta$ -[(R)-2-(p-hydroxyphenyl)-2-(coumarin-3-carboxamido)acetamido]-2-carboxy-1-azabicyclo[4.2.0]oct-2-en-8-one.

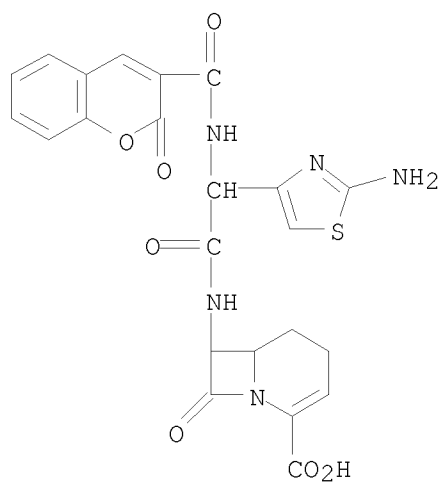
IT 82514-79-2P 82514-88-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and bactericidal activity of)  
 RN 82514-79-2 CAPLUS  
 CN 1-Azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[2-(4-hydroxyphenyl)-2-[[2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-8-oxo- (CA INDEX NAME)

10/513699



RN 82514-88-3 CAPLUS

CN 1-Azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-[[[2-(2-amino-4-thiazolyl)-2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-8-oxo- (CA INDEX NAME)



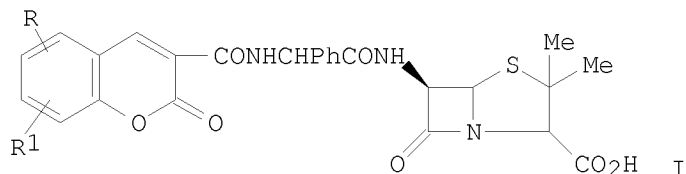


10/513699

L9 ANSWER 258 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1982:423532 CAPLUS  
DOCUMENT NUMBER: 97:23532  
ORIGINAL REFERENCE NO.: 97:4113a,4116a  
TITLE: 6-[D- $\alpha$ -(Coumarin-3-carboxamido)arylacetamido]penicillanic acids or salts  
INVENTOR(S): Sassiver, Martin L.; Boothe, James H.  
PATENT ASSIGNEE(S): American Cyanamid Co. , USA  
SOURCE: U.S., 7 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4317774	A	19820302	US 1978-889675	19780324 <--
US 4341703	A	19820727	US 1981-304727	19810923 <--
US 4343938	A	19820810	US 1981-304757	19810923 <--

PRIORITY APPLN. INFO.: US 1978-889675 A3 19780324  
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
OTHER SOURCE(S): CASREACT 97:23532; MARPAT 97:23532  
GI



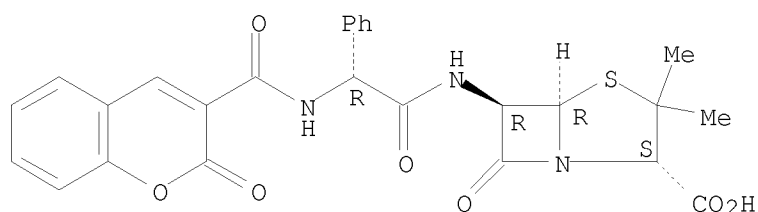
AB Bactericidal (coumarincarboxamido)acetamidopenicillanic acids I (R = H, HO, MeO, NO<sub>2</sub>, Cl; R<sub>1</sub> = H, MeO, Cl; RR<sub>1</sub> = benzo) were prepared Thus, condensing 8-allylcoumarin-3-carboxylic acid with ampicillin in methylmorpholine-CH<sub>2</sub>Cl<sub>2</sub> containing ClCO<sub>2</sub>Et gave I (R = 8-allyl; R<sub>1</sub> = H) which had a min. inhibitory concentration of 2  $\mu$ g/mL against Pseudomonas aeruginosa.

IT 67608-93-9P 67608-94-0P 67609-00-1P  
67609-05-6P 68881-93-6P 82119-87-7P  
82119-94-6P 82119-99-1P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 67608-93-9 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, [2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

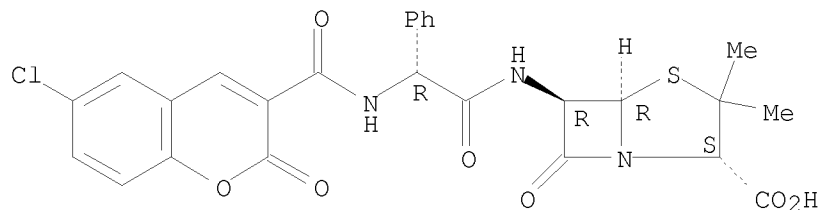
Absolute stereochemistry.

10/513699



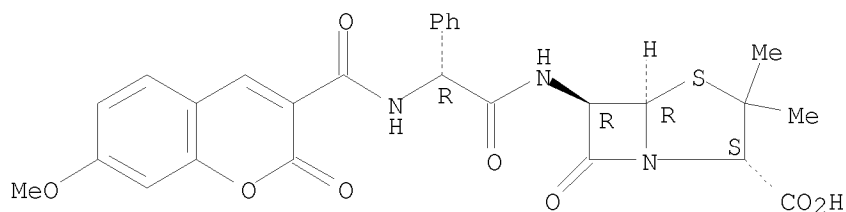
RN 67608-94-0 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-00-1 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

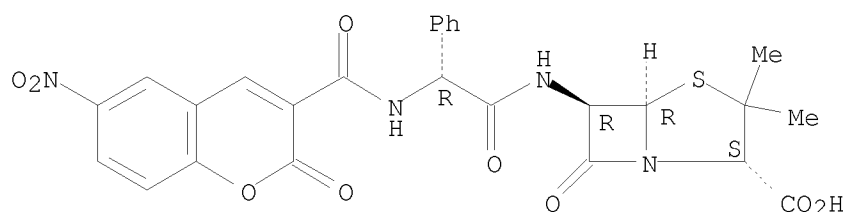
Absolute stereochemistry.



RN 67609-05-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

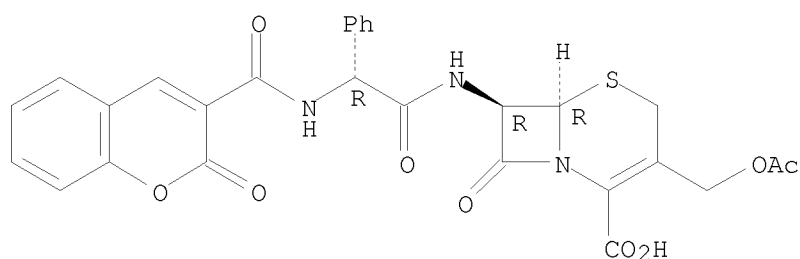
Absolute stereochemistry.

10/513699



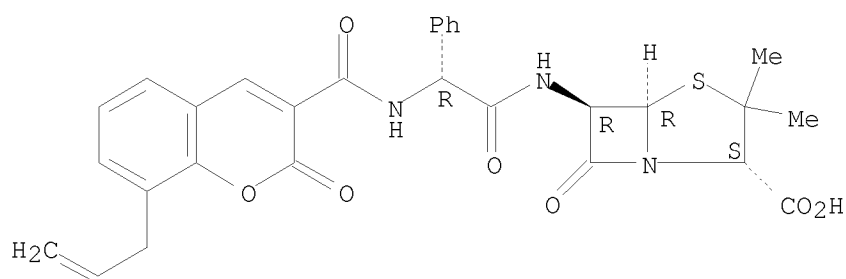
RN 68881-93-6 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-8-oxo-7-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, [6R-[6 $\alpha$ ,7 $\beta$ (R\*)]]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



RN 82119-87-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[[(2-oxo-8-(2-propenyl)-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, [2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

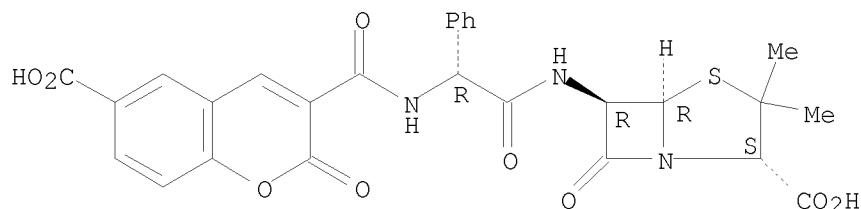
Absolute stereochemistry.



RN 82119-94-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-carboxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, [2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

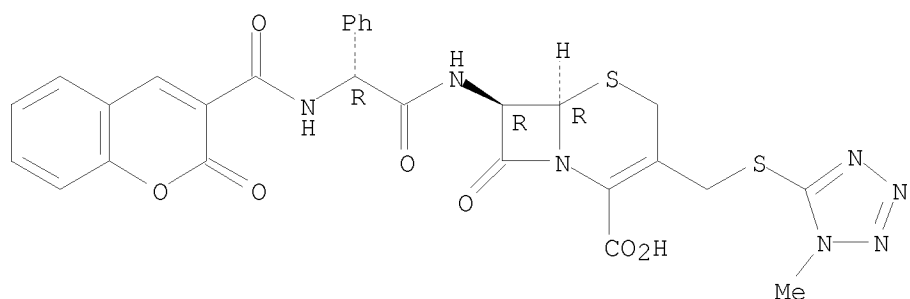
10/513699



RN 82119-99-1 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-7-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-,  
[6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



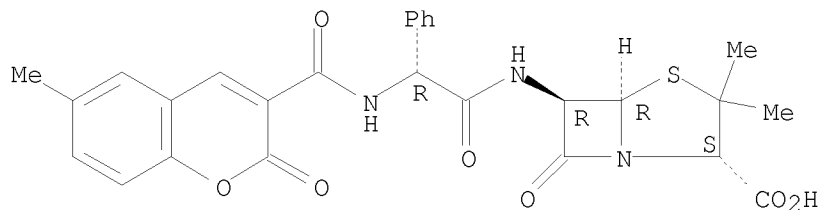
IT 82120-00-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 82120-00-1 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[[(6-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 82119-90-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation, reduction and bactericidal activity of)

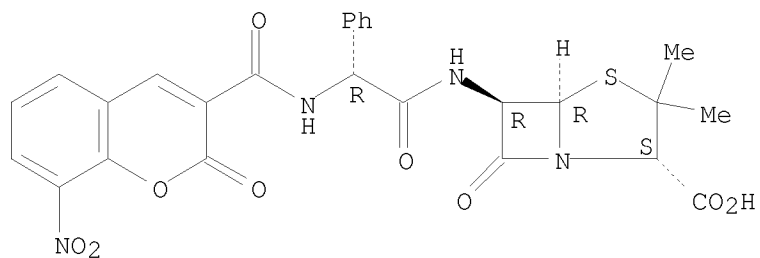
RN 82119-90-2 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,

10/513699

3,3-dimethyl-6-[[[(8-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

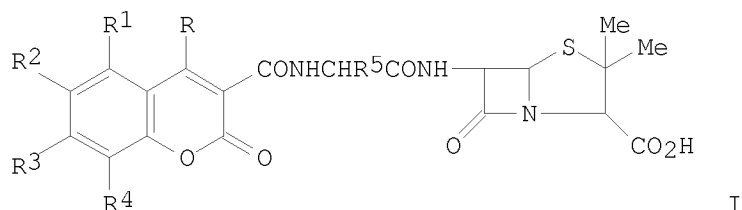
Absolute stereochemistry.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 259 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:217568 CAPLUS  
 DOCUMENT NUMBER: 96:217568  
 ORIGINAL REFERENCE NO.: 96:35941a,35944a  
 TITLE: Penicillin derivatives containing a coumarin nucleus  
 and medicines containing them  
 INVENTOR(S): Ono, Syoji; Sugiyama, Takashi; Kawakami, Yoshiko;  
 Ichikawa, Yataro; Suzuki, Yoji; Ohmori, Hitoshi;  
 Azuma, Akiko  
 PATENT ASSIGNEE(S): Teijin Ltd. , Japan  
 SOURCE: U.S., 14 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4303664	A	19811201	US 1978-884509	19780308 <--
PRIORITY APPLN. INFO.:			US 1978-884509	19780308
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S):		MARPAT 96:217568		
GI				



AB Ampicillin and amoxicillin were converted to N-acylated derivs. I [R, R1, R2, R3, and R4 (same or different) are H, SH, OH, Ac, OAc, NH2, CO2H, Cl, Br, alkoxy, alkylthio, alkylamino, carbalkoxy; R5 = Ph, 4-HOC6H4], which exhibited bactericidal activity. A mixture of coumarin-3-carboxylic acid and ClCOCOC1 was refluxed, the excess ClCOCOC1 was removed, the residue was added to Me2CO, and the mixture was added to Na ampicillin in water to give I (R5 = Ph, R = R1 = R2 = R3 = R4 = H).

IT 67608-93-9P 67608-94-0P 67608-95-1P  
 67608-97-3P 67608-98-4P 67609-00-1P  
 67609-03-4P 67609-04-5P 67609-05-6P  
 67609-06-7P 67609-07-8P 67609-08-9P  
 67609-10-3P 67609-11-4P 67609-14-7P  
 67609-18-1P 67609-19-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and bactericidal activity of)

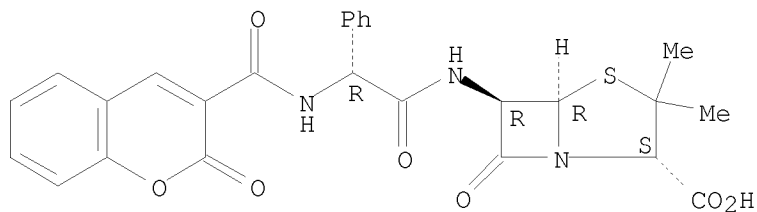
RN 67608-93-9 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
 3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-,

10/513699

[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

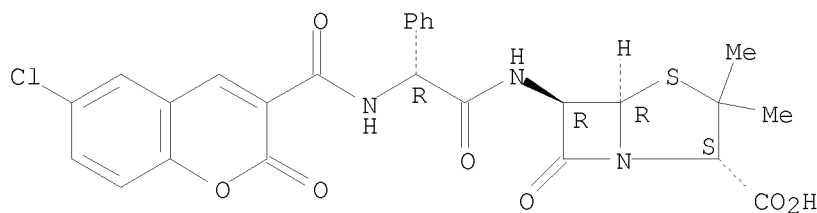
Absolute stereochemistry.



RN 67608-94-0 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

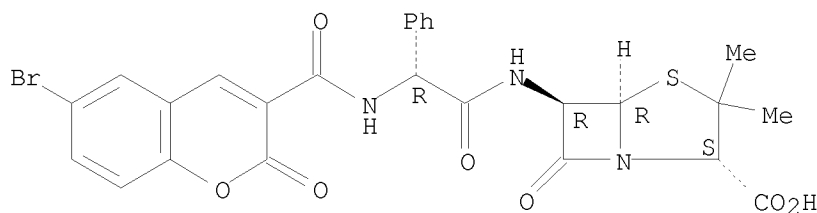
Absolute stereochemistry.



RN 67608-95-1 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

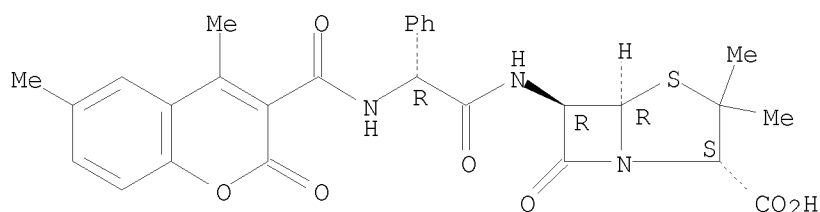


RN 67608-97-3 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(4,6-dimethyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

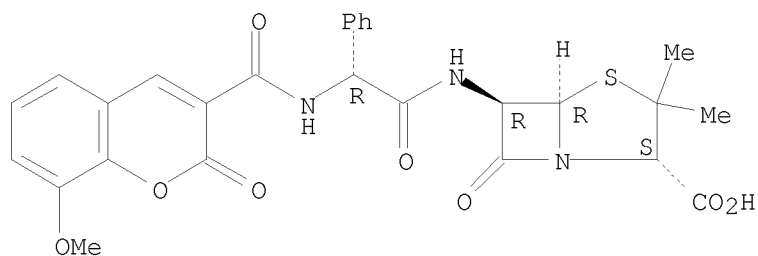
10/513699



RN 67608-98-4 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

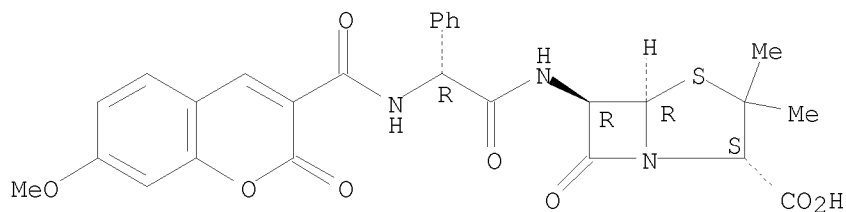
Absolute stereochemistry.



RN 67609-00-1 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



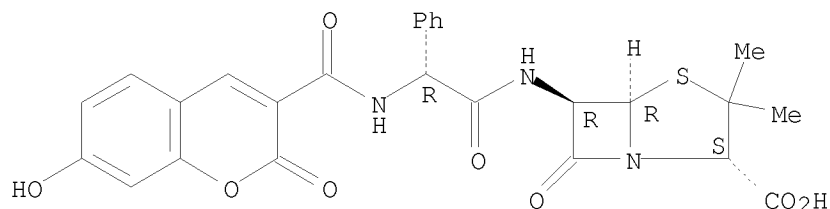
RN 67609-03-4 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

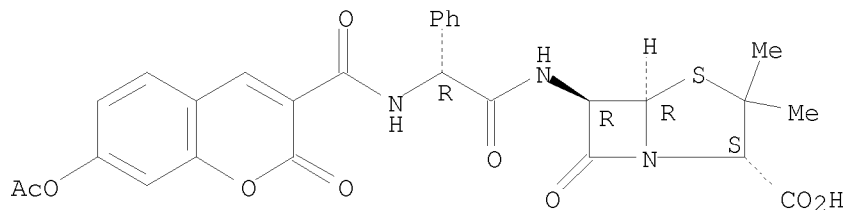


10/513699



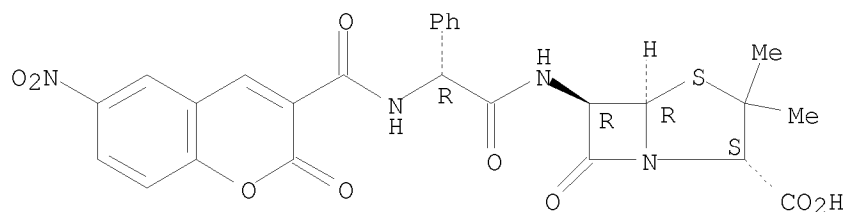
RN 67609-04-5 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-05-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[[[[6-nitro-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

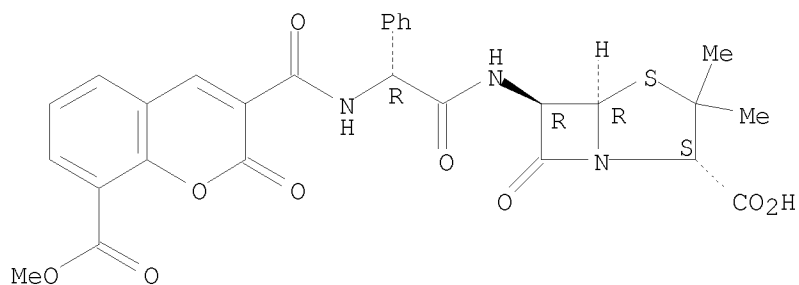
Absolute stereochemistry.



RN 67609-06-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[8-(methoxycarbonyl)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

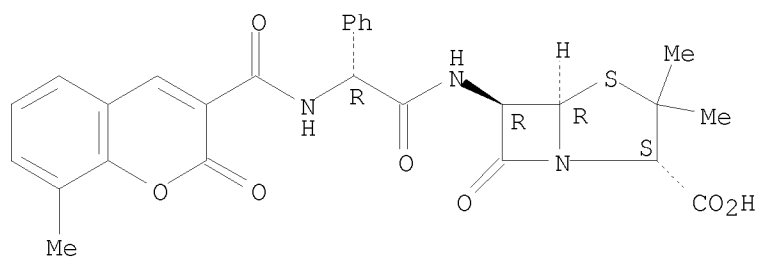
10/513699



RN 67609-07-8 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[[(8-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

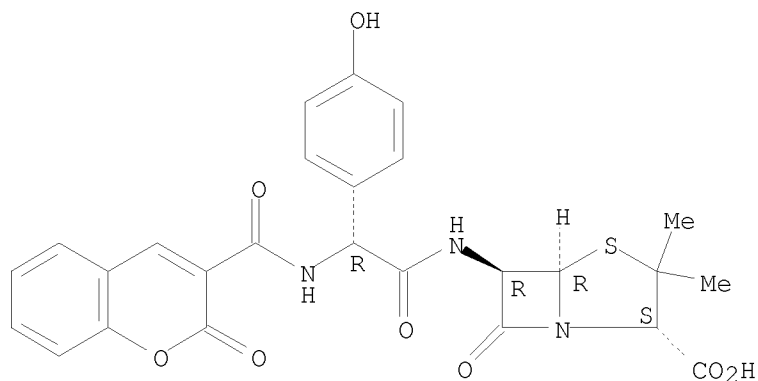
Absolute stereochemistry.



RN 67609-08-9 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(4-hydroxyphenyl)[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-10-3 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,

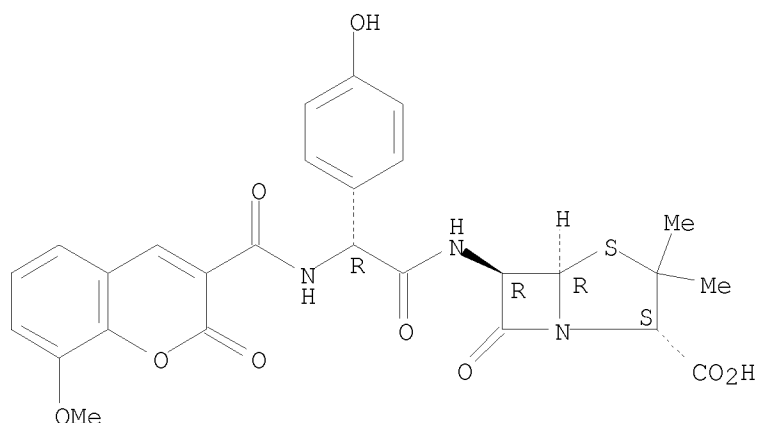
<12/04/2007>

Erich Leese

10/513699

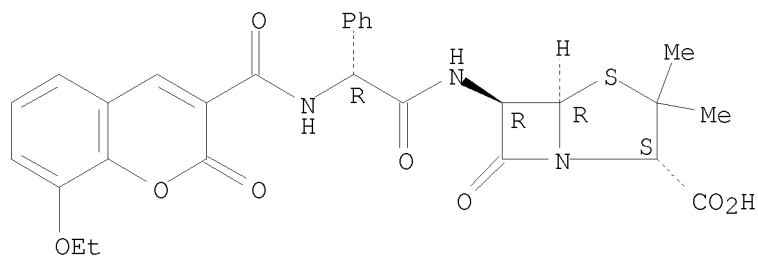
6-[[[(4-hydroxyphenyl)[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-11-4 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[(8-ethoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

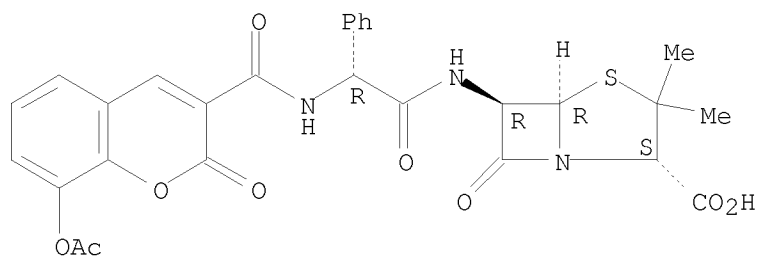
Absolute stereochemistry.



RN 67609-14-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[(8-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

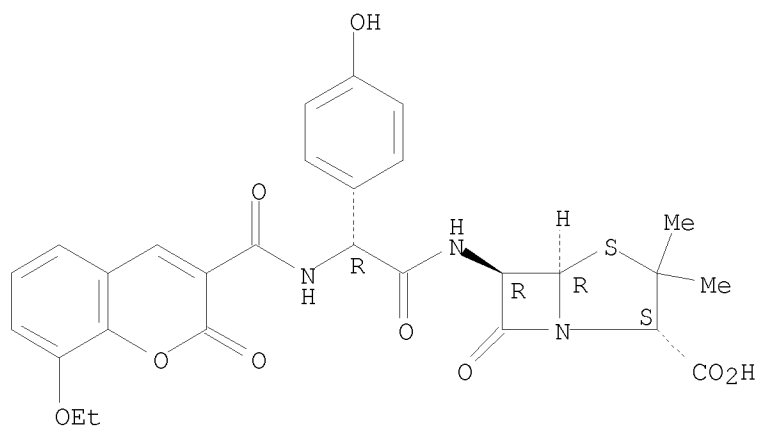
Absolute stereochemistry.

10/513699



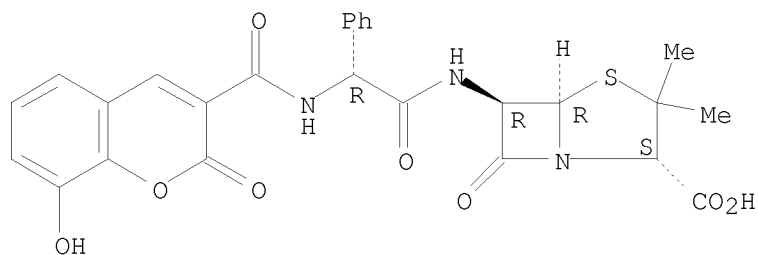
RN 67609-18-1 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(8-ethoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-  
hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-19-2 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 81017-31-4P

<12/04/2007>

Erich Leese

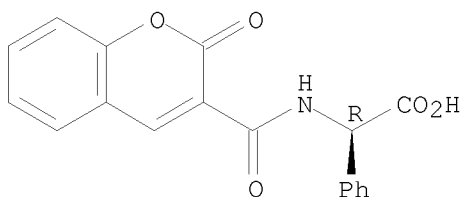
10/513699

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with thionyl chloride)

RN 81017-31-4 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-  
, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



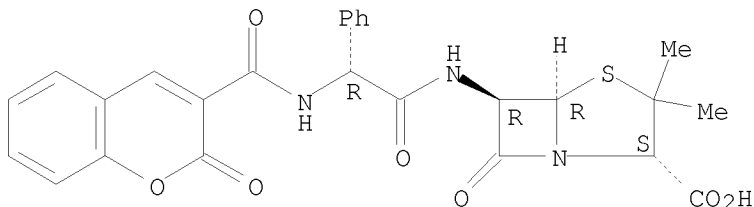
IT 67609-13-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 67609-13-6 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-, monosodium salt,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na

IT 81017-32-5P

81017-33-6P

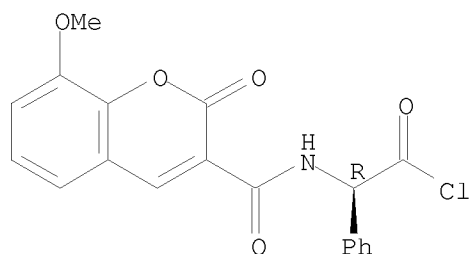
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, and N-acylation of aminopenicillanic acid by)

RN 81017-32-5 CAPLUS

CN Benzeneacetyl chloride,  $\alpha$ -[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

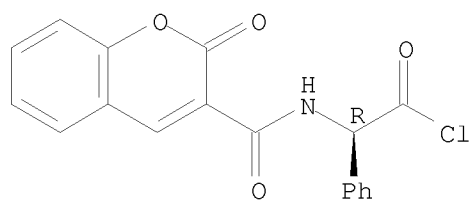
10/513699



RN 81017-33-6 CAPLUS

CN Benzeneacetyl chloride,  $\alpha$ -[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 2

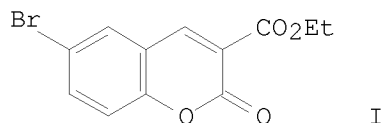
THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/513699

L9 ANSWER 260 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1982:135383 CAPLUS  
DOCUMENT NUMBER: 96:135383  
ORIGINAL REFERENCE NO.: 96:22045a,22048a  
TITLE: Chemotherapeutic studies on schistosomiasis. XXV.  
Derivatives of substituted coumarin-3-carboxylic  
esters and amides  
AUTHOR(S): Zhang, Yuanlang; Chen, Baozhen; Zheng, Keqin; Xu,  
Mouli; Zhang, Lizhu; Lei, Xinghan  
CORPORATE SOURCE: Shanghai Inst. Pharm. Ind. Res., Shanghai, Peop. Rep.  
China  
SOURCE: Yaoxue Xuebao (1982), 17(1), 17-22  
CODEN: YHHPAL; ISSN: 0513-4870  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
GI



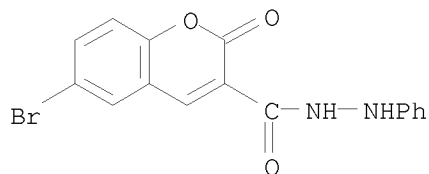
AB Of 57 title compds. synthesized and tested for anthelmintic activity, 6 compds. had pronounced anthelmintic activity against Schistosomiasis japonica. Et 6-bromocoumarin-3-carboxylate (I) [2199-90-8] was the most effective.

IT	38486-13-4P	81309-12-8P	81309-15-1P
	81309-16-2P	81309-17-3P	81309-18-4P
	81309-19-5P	81309-20-8P	81309-21-9P
	81309-22-0P	81309-23-1P	81309-24-2P
	81309-25-3P	81309-26-4P	81309-27-5P
	81309-28-6P	81309-29-7P	81309-30-0P
	81309-31-1P	81309-32-2P	

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation and anthelmintic activity of)

RN 38486-13-4 CAPLUS

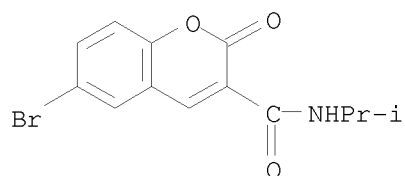
CN 2H-1-Benzopyran-3-carboxylic acid, 6-bromo-2-oxo-, 2-phenylhydrazide (CA INDEX NAME)



RN 81309-12-8 CAPLUS

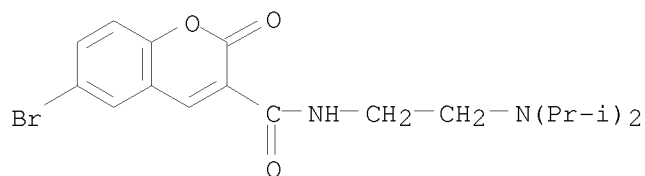
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(1-methylethyl)-2-oxo- (CA INDEX NAME)

10/513699



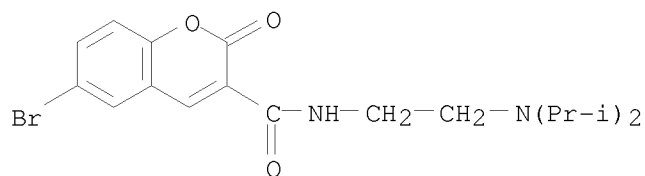
RN 81309-15-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[bis(1-methylethyl)amino]ethyl]-6-bromo-2-oxo-, hydrochloride (1:1) (CA INDEX NAME)



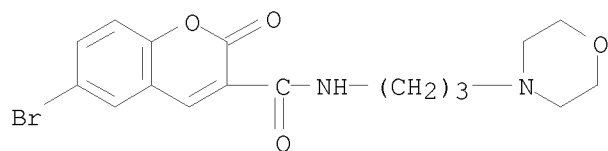
RN 81309-16-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[bis(1-methylethyl)amino]ethyl]-6-bromo-2-oxo- (CA INDEX NAME)



RN 81309-17-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-[3-(4-morpholinyl)propyl]-2-oxo- (CA INDEX NAME)

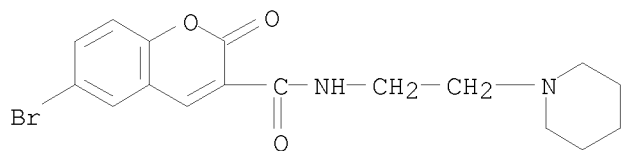


RN 81309-18-4 CAPLUS

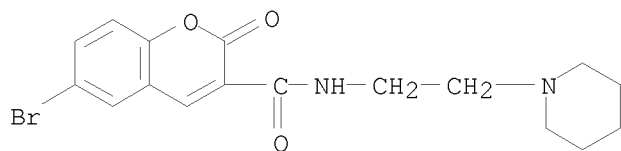
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[2-(1-piperidiny)ethyl]- (CA INDEX NAME)



10/513699

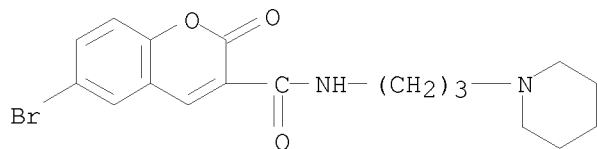


RN 81309-19-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[2-(1-piperidinyl)ethyl]-,  
hydrochloride (1:1) (CA INDEX NAME)

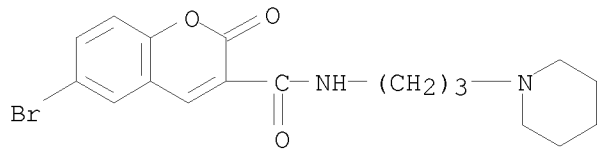


● HCl

RN 81309-20-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[3-(1-piperidinyl)propyl]-,  
(CA INDEX NAME)



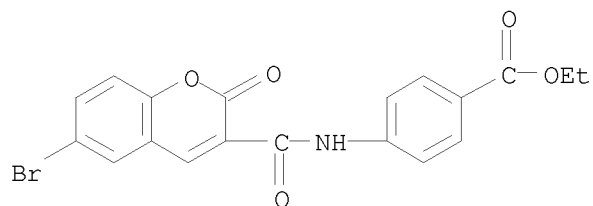
RN 81309-21-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-[3-(1-piperidinyl)propyl]-,  
hydrochloride (1:1) (CA INDEX NAME)



● HCl

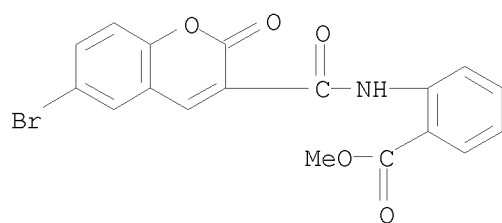
RN 81309-22-0 CAPLUS  
CN Benzoic acid, 4-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
ethyl ester (CA INDEX NAME)

10/513699



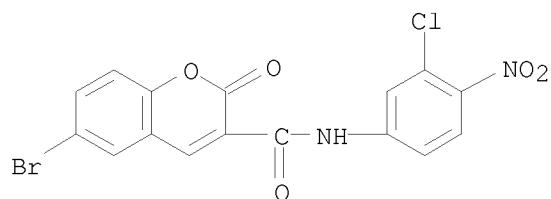
RN 81309-23-1 CAPLUS

CN Benzoic acid, 2-[[6-bromo-2-oxo-2H-1-benzopyran-3-yl]carbonylamino]-, methyl ester (CA INDEX NAME)



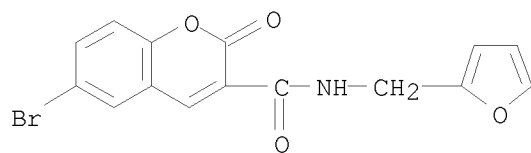
RN 81309-24-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3-chloro-4-nitrophenyl)-2-oxo- (CA INDEX NAME)



RN 81309-25-3 CAPLUS

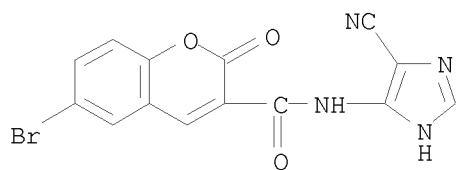
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-furanylmethyl)-2-oxo- (CA INDEX NAME)



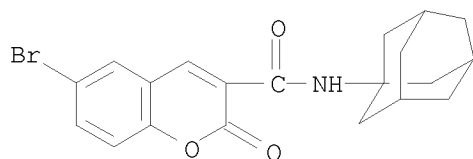
RN 81309-26-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-cyano-1H-imidazol-5-yl)-2-oxo- (CA INDEX NAME)

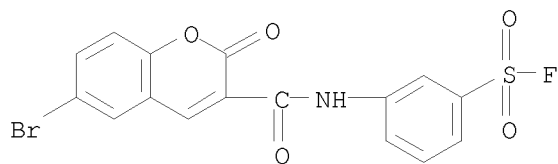
10/513699



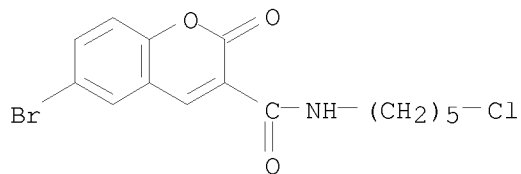
RN 81309-27-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl- (CA INDEX NAME)



RN 81309-28-6 CAPLUS  
CN Benzenesulfonyl fluoride, 3-[[ (6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)

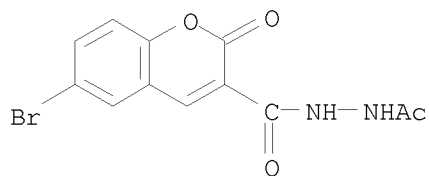


RN 81309-29-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(5-chloropentyl)-2-oxo- (CA INDEX NAME)

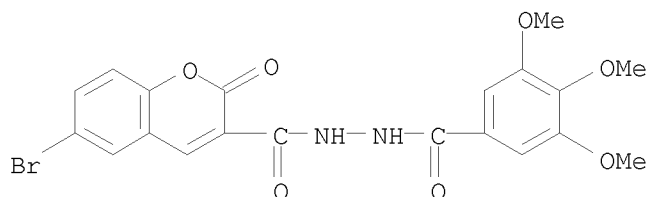


RN 81309-30-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 6-bromo-2-oxo-, 2-acetylhydrazide (CA INDEX NAME)

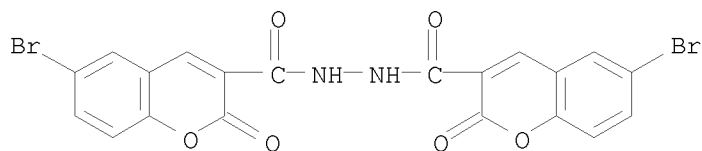
10/513699



RN 81309-31-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 6-bromo-2-oxo-,  
2-(3,4,5-trimethoxybenzoyl)hydrazide (CA INDEX NAME)

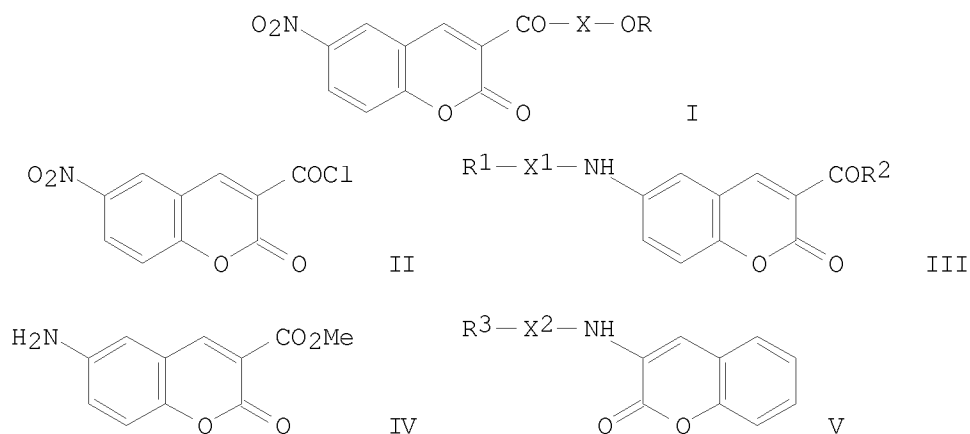


RN 81309-32-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 6-bromo-2-oxo-,  
2-[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]hydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 35 THERE ARE 35 CAPLUS RECORDS THAT CITE THIS  
RECORD (38 CITINGS)

L9 ANSWER 261 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1982:104738 CAPLUS  
 DOCUMENT NUMBER: 96:104738  
 ORIGINAL REFERENCE NO.: 96:17224h,17225a  
 TITLE: Synthesis and biological activity of some new 3- and 6-substituted coumarin amino acid derivatives. Part I  
 AUTHOR(S): El-Naggar, A. M.; Ahmed, F. S. M.; Abd El-Salam, A. M.; Radi, M. A.; Latif, M. S. A.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
 SOURCE: Journal of Heterocyclic Chemistry (1981), 18(6), 1203-7  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB 6-Nitrocoumarin-3-carbonyl amino acids I (X = Gly, Ser, Thr, Val, Leu, DL-Nle, Phe, Tyr, Trp, R = H; X = Gly, Ser,  $\beta$ -Ala, DL-Nle, Phe, Tyr, Trp, R = Me) were prepared in 43-72% yields by acylating the appropriate amino acids or their Me esters by acid chloride II, whereas dipeptides I (X = Gly-DL-Ser, Val-DL-Ser, Gly-Phe, Gly-Tyr, Tyr-DL-Ser, Val-Phe, Val-Tyr, Tyr-Phe, Tyr-Tyr; R = Me) were prepared in 53-76% yields by coupling the appropriate amino acid derivs. I (X = amino acid residue, R = H) with amino acid Me esters by DCC. Coumarin-3-carboxylic acids III [R<sup>1</sup> = phthaloyl (Pht), tosyl (Tos); X<sup>1</sup> = Gly,  $\beta$ -Ala, Ala, Val, Leu, Phe; R<sup>2</sup> = OMe] were prepared in 45-91% yields by amidating the corresponding Pht or Tos amino acid chlorides with 6-aminocoumarin IV, whereas 3-aminocoumarins V (R<sup>3</sup> = Pht, X<sup>2</sup> = Gly, Ala,  $\beta$ -Ala, Val, Leu, Phe; R<sup>3</sup> = Tos, X<sup>2</sup> = Gly, Ala, DL-Ala,  $\beta$ -Ala, DL-Val, DL-Ser) were prepared in 43-64% yields by acylating 3-aminocoumarin with the appropriate Pht or Tos amino acids by DCC. III.HCl (R<sup>1</sup> = H, X<sup>1</sup> = Ala, Val, Leu, Phe, R<sup>2</sup> = NHNH<sub>2</sub>) and V (R<sup>3</sup> = H, X<sup>2</sup> =  $\beta$ -Ala, Val) were prepared by the hydrazinolysis of the corresponding N-Pht derivs. V (R<sup>3</sup> = Tos, X<sup>2</sup> = Val-Leu) was also prepared. Twenty-four of the above I, III, and V derivs. exhibited antimicrobial activities.

IT 80613-35-0P 80613-38-3P 80613-44-1P

10/513699

80613-50-9P

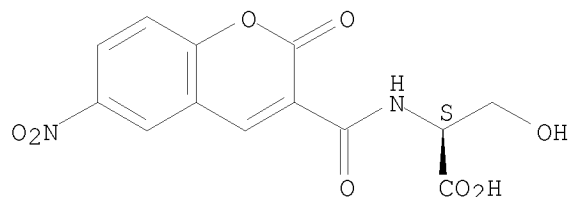
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antimicrobial activity of)

RN 80613-35-0 CAPLUS

CN L-Serine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

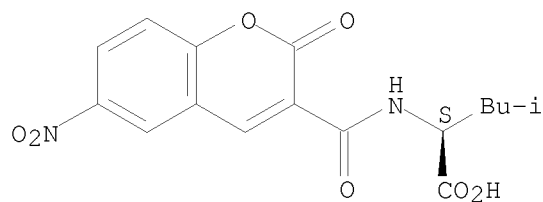
Absolute stereochemistry.



RN 80613-38-3 CAPLUS

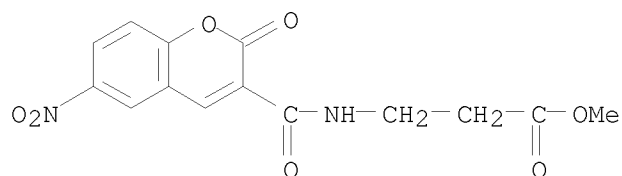
CN L-Leucine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 80613-44-1 CAPLUS

CN β-Alanine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

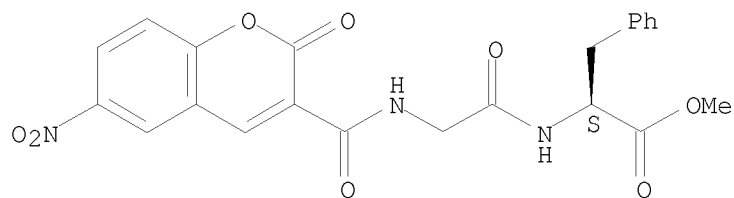


RN 80613-50-9 CAPLUS

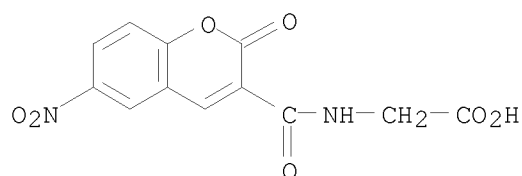
CN L-Phenylalanine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]glycyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699

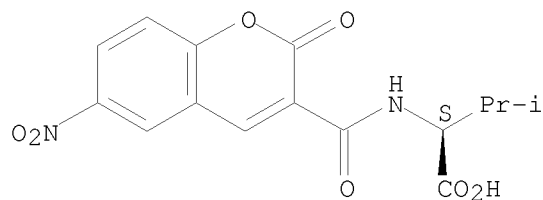


IT 80613-34-9P 80613-37-2P 80613-40-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and peptide coupling reaction and antimicrobial activity of)  
RN 80613-34-9 CAPLUS  
CN Glycine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX  
NAME)



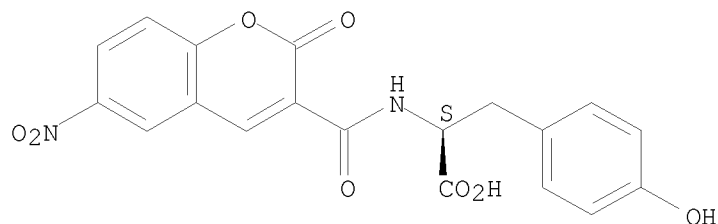
RN 80613-37-2 CAPLUS  
CN L-Valine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX  
NAME)

Absolute stereochemistry.



RN 80613-40-7 CAPLUS  
CN L-Tyrosine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX  
NAME)

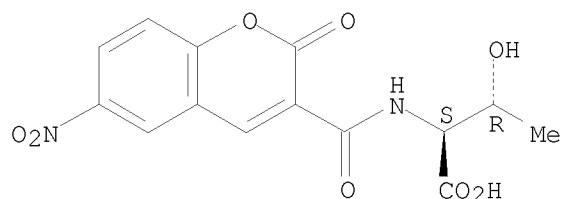
Absolute stereochemistry.



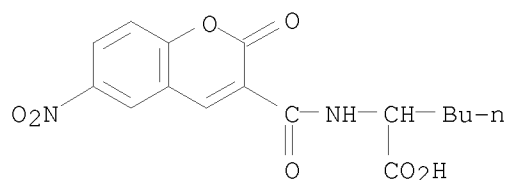
10/513699

IT 80613-36-1P 80613-39-4P 80613-41-8P  
80613-42-9P 80613-43-0P 80613-45-2P  
80613-46-3P 80613-47-4P 80613-48-5P  
80613-49-6P 80613-51-0P 80613-52-1P  
80613-53-2P 80613-54-3P 80613-55-4P  
80613-56-5P 80632-92-4P 80632-93-5P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 80613-36-1 CAPLUS  
CN L-Threonine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX  
NAME)

Absolute stereochemistry.

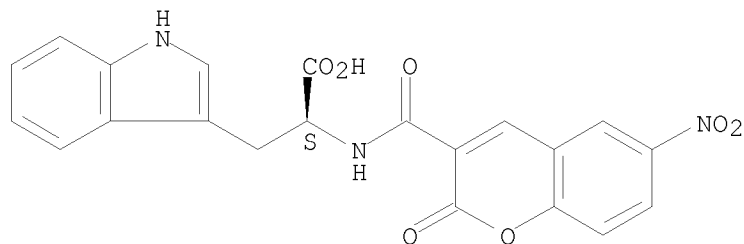


RN 80613-39-4 CAPLUS  
CN Norleucine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX  
NAME)



RN 80613-41-8 CAPLUS  
CN L-Tryptophan, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX  
NAME)

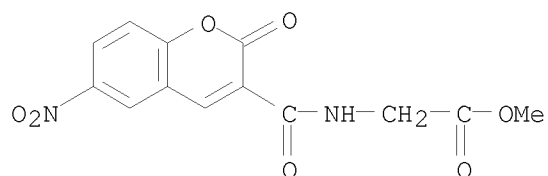
Absolute stereochemistry.



RN 80613-42-9 CAPLUS  
CN Glycine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)

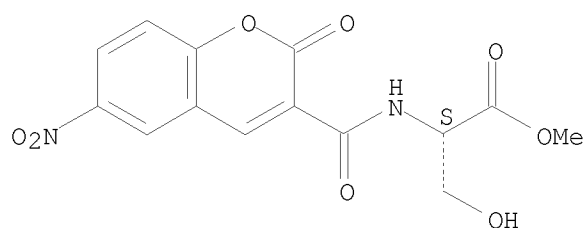


10/513699

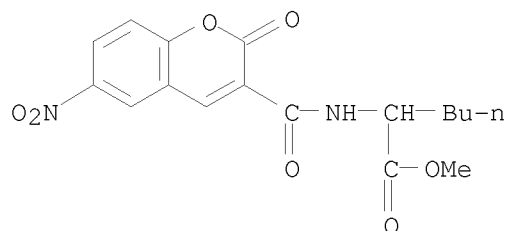


RN 80613-43-0 CAPLUS  
CN L-Serine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)

Absolute stereochemistry.

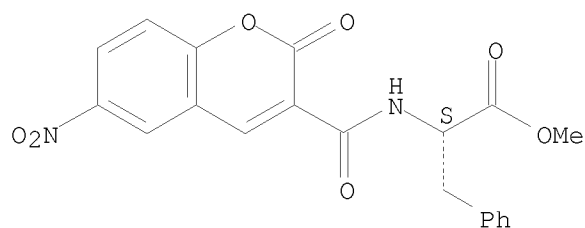


RN 80613-45-2 CAPLUS  
CN Norleucine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)



RN 80613-46-3 CAPLUS  
CN L-Phenylalanine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)

Absolute stereochemistry.



RN 80613-47-4 CAPLUS

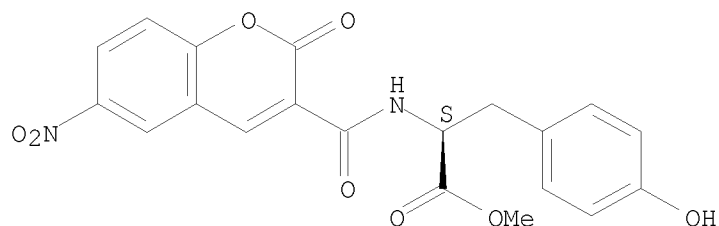
<12/04/2007>

Erich Leese

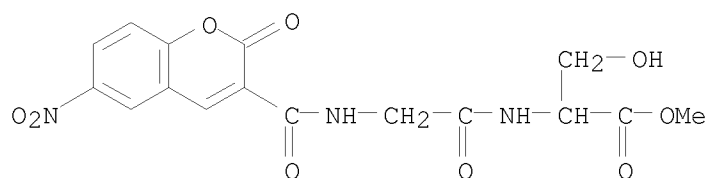
10/513699

CN L-Tyrosine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

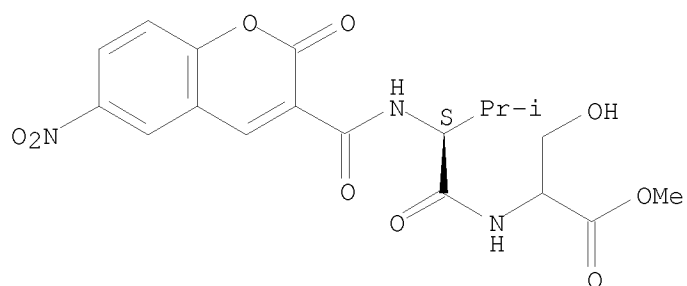


RN 80613-48-5 CAPLUS  
CN Serine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]glycyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 80613-49-6 CAPLUS  
CN Serine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-valyl]-, methyl ester (9CI) (CA INDEX NAME)

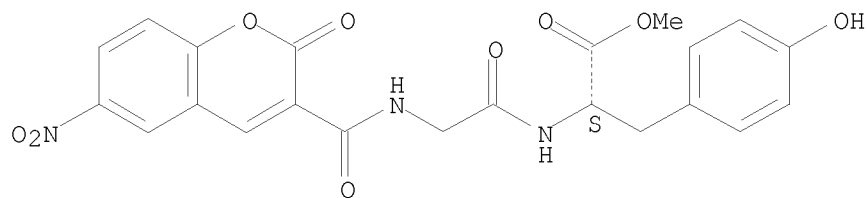
Absolute stereochemistry.



RN 80613-51-0 CAPLUS  
CN L-Tyrosine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]glycyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

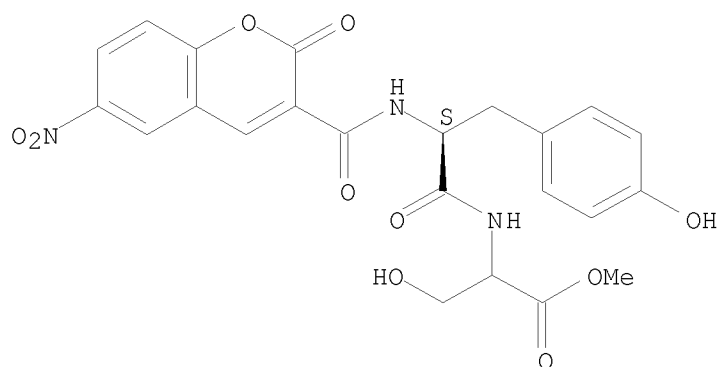
10/513699



RN 80613-52-1 CAPLUS

CN Serine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-tyrosyl]-, methyl ester (9CI) (CA INDEX NAME)

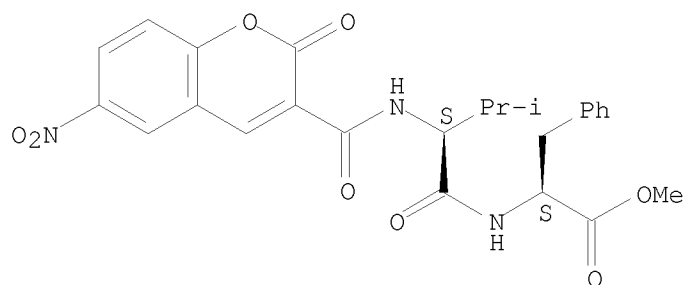
Absolute stereochemistry.



RN 80613-53-2 CAPLUS

CN L-Phenylalanine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-valyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

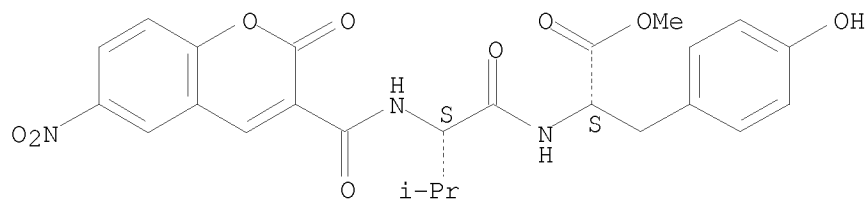


RN 80613-54-3 CAPLUS

CN L-Tyrosine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-valyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

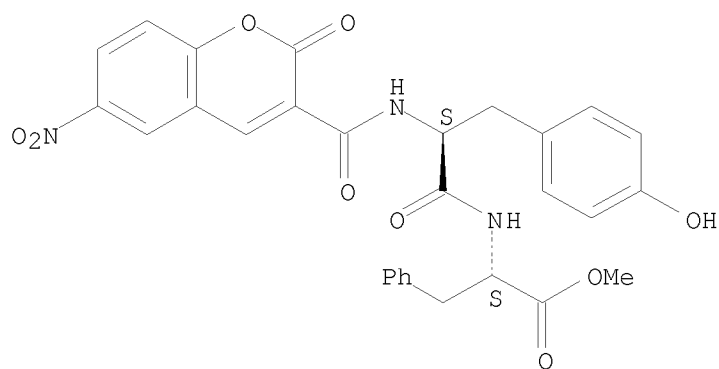
10/513699



RN 80613-55-4 CAPLUS

CN L-Phenylalanine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-tyrosyl]-, methyl ester (9CI) (CA INDEX NAME)

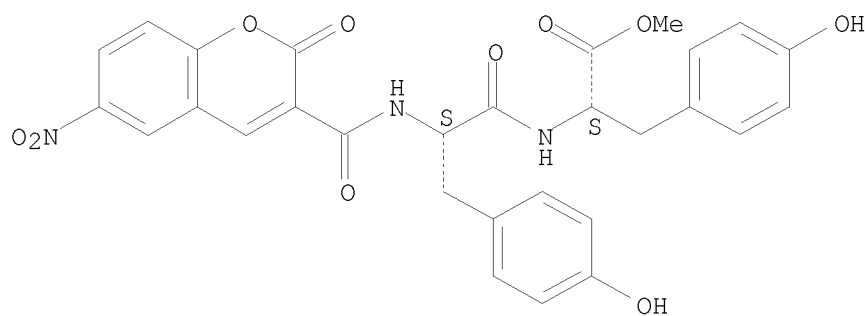
Absolute stereochemistry.



RN 80613-56-5 CAPLUS

CN L-Tyrosine, N-[N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-L-tyrosyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

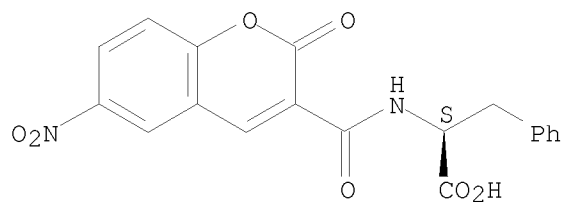


RN 80632-92-4 CAPLUS

CN L-Phenylalanine, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

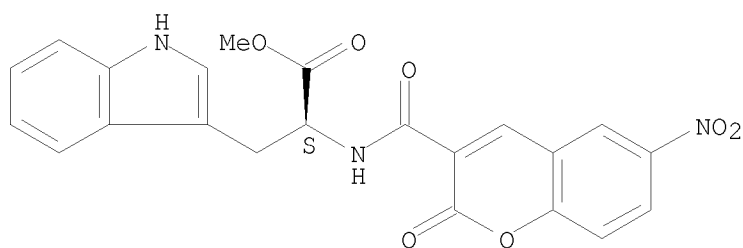
10/513699



RN 80632-93-5 CAPLUS

CN L-Tryptophan, N-[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

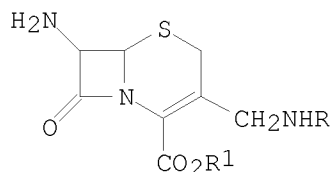


OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

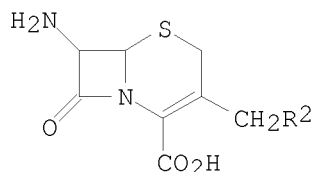
10/513699

L9 ANSWER 262 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1982:68718 CAPLUS  
DOCUMENT NUMBER: 96:68718  
ORIGINAL REFERENCE NO.: 96:11285a,11288a  
TITLE: 7-Amino-3-substituted methylcephemcarboxylic acids  
PATENT ASSIGNEE(S): Toyama Chemical Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56140997	A	19811104	JP 1980-43519	19800404 <--
PRIORITY APPLN. INFO.: GI			JP 1980-43519	A 19800404



I



II

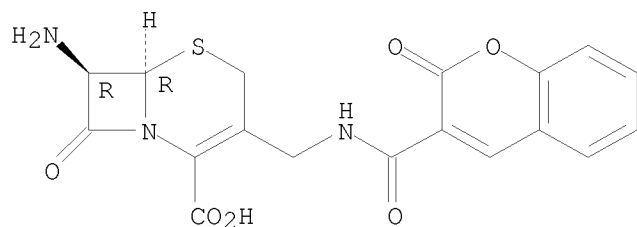
AB Twenty-four 7-amino-3-substituted methylcephemcarboxylic acids I (R = acyl; R<sub>1</sub> = H, Ph<sub>2</sub>CH) were prepared by reaction of II (R<sub>2</sub> = acyloxy, carbamoyloxy) with the appropriate nitriles in the presence of proton acids or Lewis acids (or their complexes), reaction with H<sub>2</sub>O, and optional esterification. Thus, a mixture of 2.72 g II (R<sub>2</sub> = AcO), 15 mL H<sub>2</sub>C:CHCN, and 5.68 g BF<sub>3</sub>-Et<sub>2</sub>O was kept 5 h at room temperature, concentrated, dissolved in 50% aqueous Me<sub>2</sub>CO, and adjusted to pH 3.5 with 28% aqueous NH<sub>3</sub> with ice cooling to give 79% I (R = Ac, R<sub>1</sub> = H), which (2.71 g) was treated with 4 g Ph<sub>2</sub>CN<sub>2</sub> in MeOH in the presence of 1.9 g 4-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H.H<sub>2</sub>O 30 min to give 65% I (R = Ac, R<sub>1</sub> = Ph<sub>2</sub>CH).

IT 80717-95-9P 80734-13-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 80717-95-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-8-oxo-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-,  
(6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

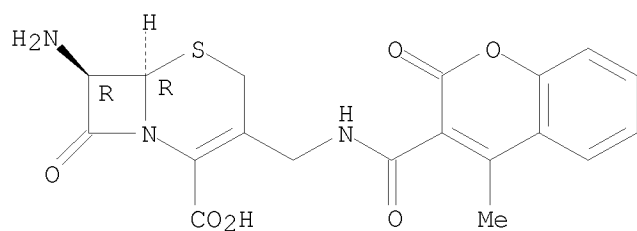
10/513699



RN 80734-13-0 CAPLUS

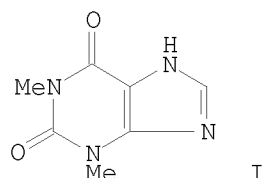
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
7-amino-3-[[[(4-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-8-  
oxo-, (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 263 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1982:62477 CAPLUS  
DOCUMENT NUMBER: 96:62477  
ORIGINAL REFERENCE NO.: 96:10127a,10130a  
TITLE: Serum theophylline determination by fluorescence  
polarization immunoassay utilizing an umbelliferone  
derivative as a fluorescent label  
AUTHOR(S): Li, Thomas M.; Benovic, Jeffrey L.; Burd, John F.  
CORPORATE SOURCE: Immunochem. Lab., Miles Laboratories, Inc., Elkhart,  
IN, 46515, USA  
SOURCE: Analytical Biochemistry (1981), 118(1),  
102-7  
CODEN: ANBCA2; ISSN: 0003-2697  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



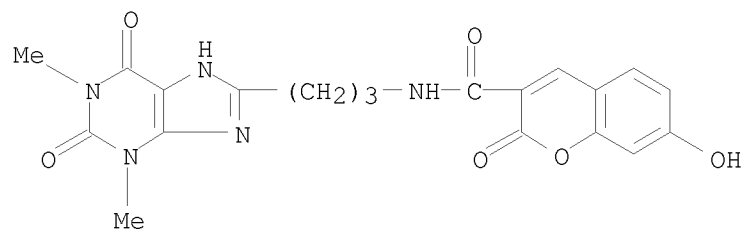
AB The development of a nonradioisotopic homogeneous immunoassay to determination serum theophylline (I) [58-55-9] concns. using fluorescence polarization is described. The fluorescence polarization immunoassay is based on labeling the analyte with a fluorescent probe and monitoring the changes in the probe's fluorescence polarization occurring in the hapten-antibody reaction. An umbelliferone theophylline conjugate [80475-50-9], is used in the polarization immunoassay. This fluorescent probe is characterized by a high quantum yield, a large extinction coefficient, a large Stokes shift, and the absence of nonspecific interaction with normal human serum. The spectroscopic properties of this label including both the excitation and emission polarization spectra are presented, and the procedure to obtain the optimized fluorescence polarization standard curve is described. Using the polarization immunoassay technique, the theophylline concns. of 25 clin. serum samples were determined. The values obtained correlated well with values determined by high-pressure liquid chromatog. (correlation coefficient, 0.93).

IT 80475-50-9  
RL: BIOL (Biological study)  
(as fluorescence label, in theophylline fluorescence polarization immunoassay)

RN 80475-50-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-2-oxo-N-[3-(2,3,6,9-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (CA INDEX NAME)



10/513699

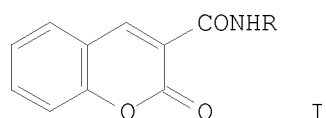


<12/04/2007>

Erich Leese

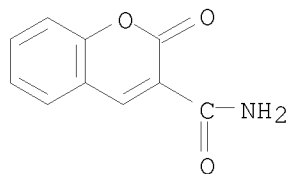
10/513699

L9 ANSWER 264 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1982:35022 CAPLUS  
DOCUMENT NUMBER: 96:35022  
ORIGINAL REFERENCE NO.: 96:5785a,5788a  
TITLE: Studies of unsaturated lactones. LII. Reaction of  
functionally substituted coumarins with certain  
nucleophilic agents  
AUTHOR(S): Avetisyan, A. A.; Vanyan, E. V.; Boyadzhyan, Zh. G.;  
Dangyan, M. T.  
CORPORATE SOURCE: Erevan. Gos. Univ., Yerevan, USSR  
SOURCE: Armyanskii Khimicheskii Zhurnal (1981),  
34(10), 876-9  
CODEN: AYKZAN; ISSN: 0515-9628  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
OTHER SOURCE(S): CASREACT 96:35022  
GI



AB Reaction of 3-carboxycoumarin with amines in a 1:1-1:1.5 molar ratio gave the corresponding ammonium salts. With a 1:4 molar ratio the ring was cleaved and o-HOC6H4CHO and RNHCOCH2CO2- RNH3+ (R = benzyl, Bu) were obtained. With 3-carbethoxycoumarin and 1-1.5 mol amines amides I were obtained; with 4 mol amines o-HOC6H4CHO and CH2(CONHR)2 were obtained. The reactions were carried out at room temperature and at 90-5°.

IT 1846-78-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 265 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1981:619949 CAPLUS

DOCUMENT NUMBER: 95:219949

ORIGINAL REFERENCE NO.: 95:36697a,36700a

TITLE: Some 2-(dialkylamino) substituted chromenylium salts

AUTHOR(S): Mazzei, M.; Ermili, A.; Sottofattori, E.; Roma, G.

CORPORATE SOURCE: Ist. Sci. Farm., Univ. Genova, Genoa, 16132, Italy

SOURCE: Journal of Heterocyclic Chemistry (1981),

18(5), 863-8

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 95:219949

AB The reaction of 2-(dialkylamino)-7-methoxychromones with malononitrile in the presence of Ac<sub>2</sub>O afforded [2-(dialkylamino)-7-methoxy-4H-chromen-4-ylidene]malononitriles. When these compds. were refluxed with concentrated HCl (or HI), 2-(dialkylamino)-7-methoxy (or hydroxy)-4-methylchromenylium salts were obtained. The use of concentrated H<sub>2</sub>SO<sub>4</sub> or polyphosphoric acid in the hydrolysis was also investigated. The preparation of ethyl [2-(dialkylamino)-7-methoxy-4H-chromen-4-ylidene]cyanoacetates and their behavior when treated with acids are also described, as well as the synthesis of some 3-(dialkylamino)-1-methylnaphtho[2,1-b]pyrylium salts.

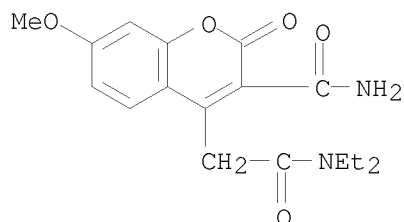
IT 79966-65-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of)

RN 79966-65-7 CAPLUS

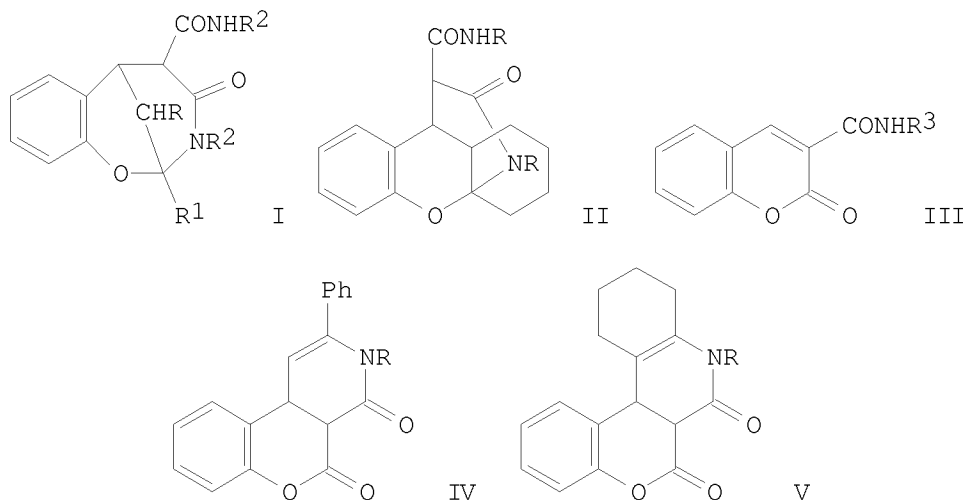
CN 2H-1-Benzopyran-4-acetamide, 3-(aminocarbonyl)-N,N-diethyl-7-methoxy-2-oxo-  
(CA INDEX NAME)



OS.CITING REF COUNT: 5

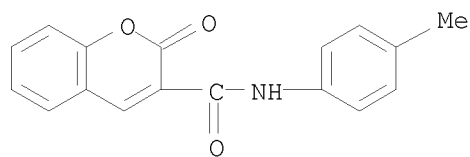
THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

L9 ANSWER 266 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:603906 CAPLUS  
 DOCUMENT NUMBER: 95:203906  
 ORIGINAL REFERENCE NO.: 95:34077a, 34080a  
 TITLE: Some reactions of 3N-arylcarbamidocoumarins:  
 synthesis of substituted  
 3,4,5,6-tetrahydro-2,6-methano-2H-1,3-benzoxazocines,  
 3,4,4a,10b-tetrahydro-5H-[1]benzopyrano[3,4-  
 c]pyridines, 1,2,3,4,9,9a-hexahydro-4a,9-iminoethano-  
 4aH-xanthenes and  
 6a,7,8,9,10,11,12,12b-octahydro-6H-[1]benzopyrano[3,4-  
 c]quinolines  
 AUTHOR(S): El-Kady, M.; El-Hashash, M. A.; Sayed, M. A.;  
 El-Sherif, M.  
 CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1981  
 ), 20B(6), 491-3  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 95:203906  
 GI



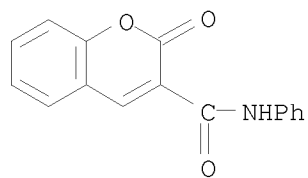
AB Substituted benzoxazocines I (R = H, Et; R<sup>1</sup> = Me, Et, Ph; R<sup>2</sup> = H, Me, Et, Ph) and xanthenecarboxamides II (R = H, Et) were prepared by Michael condensation of 3-(N-arylcarbamyl)coumarins (III; R<sup>3</sup> = Ph, 4-MeC<sub>6</sub>H<sub>4</sub>) with RCHCOR<sup>1</sup> or cyclohexanone in the presence of NH<sub>4</sub>OAc or R<sub>2</sub>NH<sub>2</sub> at room temperature. The preparation of IV (R = H, Et, Ph, 4-MeC<sub>6</sub>H<sub>4</sub>) and V (R = H, Et, Ph) was also described.  
 IT 1847-00-3 54396-25-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Michael condensation of, with ketones)  
 RN 1847-00-3 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)

10/513699



RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

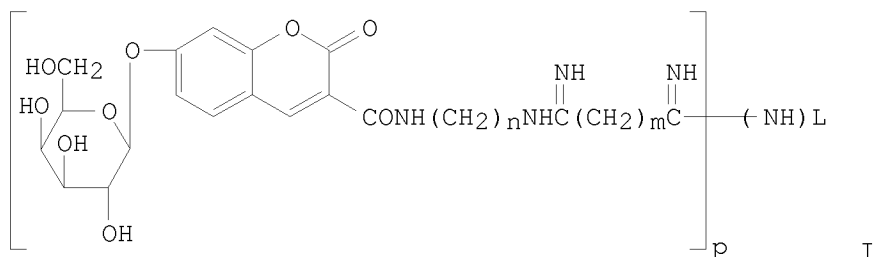


OS.CITING REF COUNT: 3

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L9 ANSWER 267 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:585485 CAPLUS  
 DOCUMENT NUMBER: 95:185485  
 ORIGINAL REFERENCE NO.: 95:30943a,30946a  
 TITLE:  $\beta$ -Galactosyl-umbelliferone-labeled protein and polypeptide conjugates  
 INVENTOR(S): Carrico, Robert J.; Ngo, That T.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4259233	A	19810331	US 1979-87522	19791023 <--
CA 1152490	A1	19830823	CA 1980-359111	19800827 <--
IL 60961	A	19831230	IL 1980-60961	19800903 <--
EP 28332	A1	19810513	EP 1980-106253	19801015 <--
EP 28332	B1	19830511		
R: DE, FR, GB				
JP 56097299	A	19810805	JP 1980-146991	19801022 <--
JP 61016939	B	19860502		
CA 1155838	A2	19831025	CA 1982-414642	19821101 <--
PRIORITY APPLN. INFO.:			US 1979-87522	A 19791023
			CA 1980-359111	A3 19800827
OTHER SOURCE(S):		MARPAT 95:185485		
GI				



AB The preparation of  $\beta$ -galactosyl-umbelliferone-labeled conjugates (I) is described where  $-(NH)L$  is a protein or peptide such as an Ig (bound through an amino group thereof),  $n$  is an integer from 2 through 10,  $m$  is an integer from 1 through 10, and  $p$  is on the average from 1 to the number of available amino groups in  $L$ . Thus, 1,6-hexanediamine was reacted with 7- $\beta$ -galactosyl-coumarin-3-carboxylic acid in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide ( $4^\circ$ , pH 5.0). After reaction overnight, the mixture was applied to a column of CM-Sepharose CL in  $NH_4^+$  form. One fraction of  $NH_4HCO_3$  eluate contained the product N-(6-aminoethyl)-7 $\beta$ -galactosylcoumarin-3-carboxamide. This product then was reacted with Me adipimidate dihydrochloride and IgG in triethylamine. The resultant  $\beta$ -galactosyl-umbelliferone-IgG conjugate (where  $n = 6$ ,  $m = 4$ ) was purified by chromatog. The fluorogenic

10/513699

IgG conjugate then was used in an enzyme immunoassay to assay for IgG in serum.

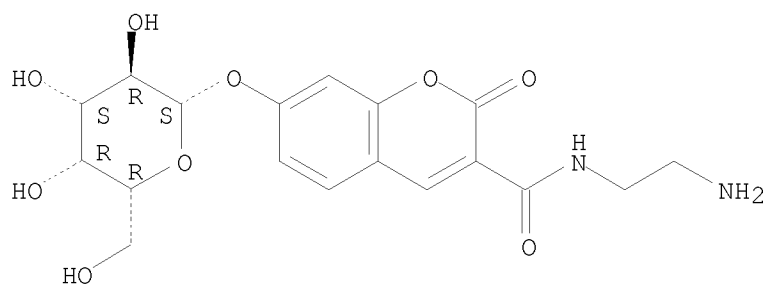
IT 78370-26-0P 78370-27-1P 78370-28-2P  
78370-29-3P 78370-30-6P 78370-31-7P  
78370-32-8P 78370-33-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, with dimethylalkyldiimidates)

RN 78370-26-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-aminoethyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

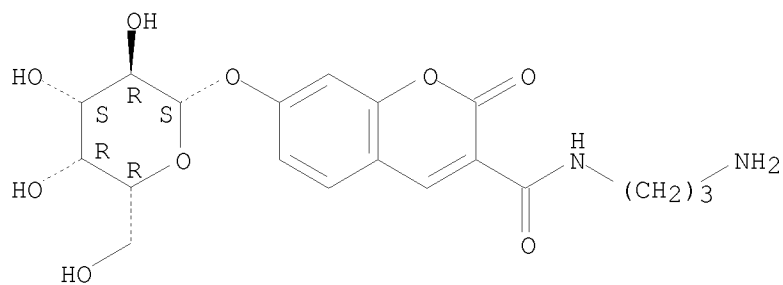
Absolute stereochemistry.



RN 78370-27-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-aminopropyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

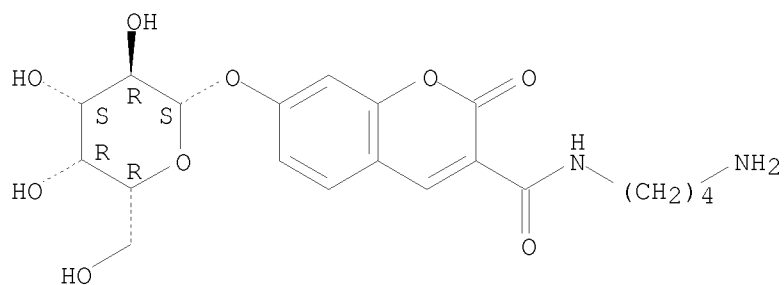


RN 78370-28-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-aminobutyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

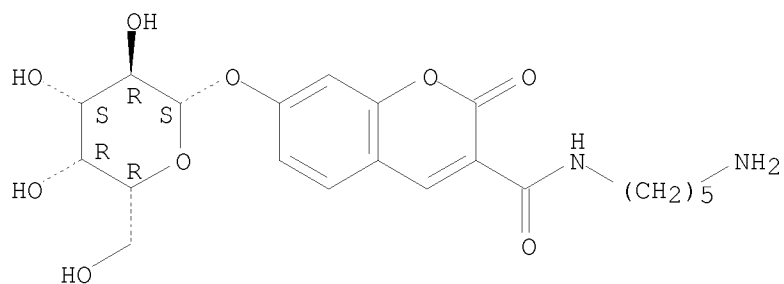
10/513699



RN 78370-29-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(5-aminopentyl)-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

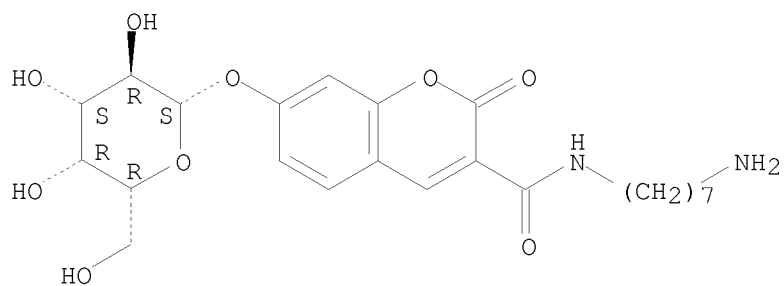
Absolute stereochemistry.



RN 78370-30-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(7-aminoheptyl)-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



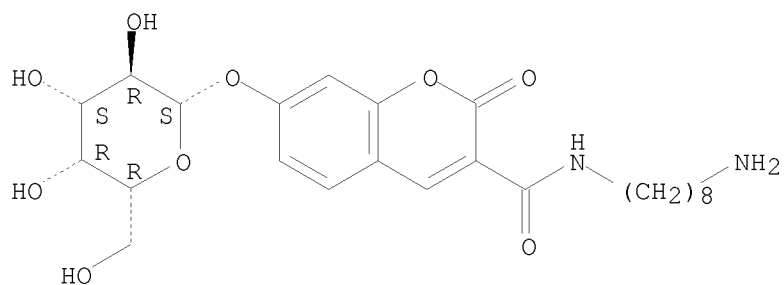
RN 78370-31-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(8-amino-octyl)-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



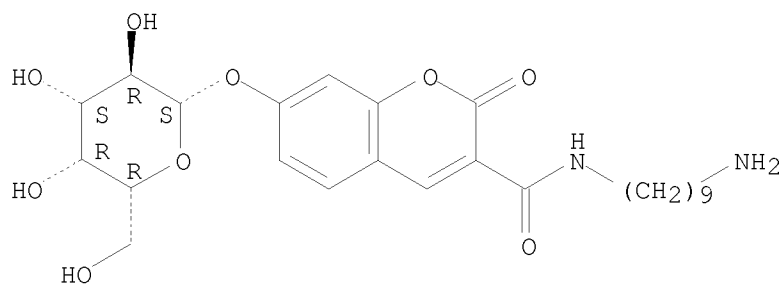
10/513699



RN 78370-32-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(9-aminononyl)-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

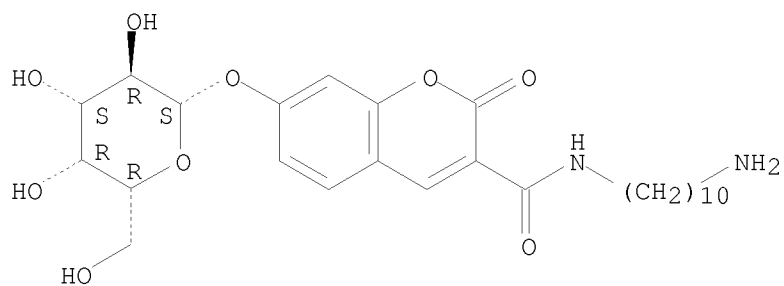
Absolute stereochemistry.



RN 78370-33-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(10-aminodecyl)-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

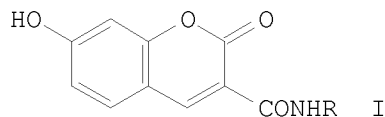
Absolute stereochemistry.



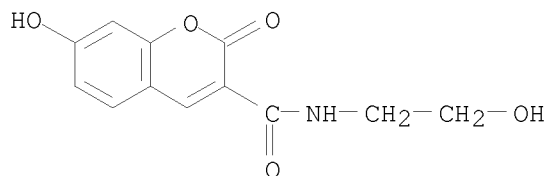
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L9 ANSWER 268 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:532674 CAPLUS  
 DOCUMENT NUMBER: 95:132674  
 ORIGINAL REFERENCE NO.: 95:22215a,22218a  
 TITLE: N-(Hydroxyalkyl)-7-hydroxycoumarin-3-carboxamides  
 INVENTOR(S): Buckler, Robert T.; Burd, John F.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4273715	A	19810616	US 1980-140019	19800414 <--
CA 1150286	A1	19830719	CA 1980-365725	19801128 <--
EP 37979	A2	19811021	EP 1981-102511	19810403 <--
EP 37979	A3	19820602		
EP 37979	B1	19840321		
R: CH, DE, FR, GB, IT				
JP 57004982	A	19820111	JP 1981-54496	19810413 <--
JP 59024155	B	19840607		
PRIORITY APPLN. INFO.:			US 1980-140019	A 19800414
OTHER SOURCE(S):			CASREACT 95:132674; MARPAT 95:132674	
GI				



AB Amides I (R = hydroxyalkyl) were prepared and are useful as instrument calibrators for fluorescent immunoassay methods (no data).  
 7-Hydroxycoumarin-3-carbonyl chloride was treated with excess H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH in dioxane at 0° to give I (R = CH<sub>2</sub>CH<sub>2</sub>OH).  
 IT 79050-06-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as instrument calibrator for fluorescence immunoassay of pharmaceuticals)  
 RN 79050-06-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-N-(2-hydroxyethyl)-2-oxo- (CA INDEX NAME)



10/513699

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 269 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:528865 CAPLUS  
 DOCUMENT NUMBER: 95:128865  
 ORIGINAL REFERENCE NO.: 95:21539a,21542a  
 TITLE: Specific binding assay employing an enzyme-cleavable  
 substrate as label  
 INVENTOR(S): Boguslaski, Robert C.; Burd, John F.; Carrico, Robert  
 J.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: U.S., 37 pp. Cont.-in-part of U.S. 4,226,978.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4279992	A	19810721	US 1979-87819	19791023 <--
US 4226978	A	19801007	US 1978-886094	19780313 <--
US 4331590	A	19820525	US 1980-147339	19800506 <--
US 4404366	A	19830913	US 1981-284137	19810716 <--
PRIORITY APPLN. INFO.:			US 1978-886094	A2 19780313
			US 1979-87819	A3 19791023
			US 1980-147339	A3 19800506

OTHER SOURCE(S): CASREACT 95:128865

AB Enzyme-cleavable fluorescence immunoassays are described which use a glycone-dye-ligand conjugate as label. The suggested glycone is a  $\beta$ -galactosyl group, and the suggested dye is umbelliferone. Drugs and proteins (including antibodies) can be determined by the method. Label preparation and assay procedures are described for a number of drugs and for

IgG.

After hydrolysis of the label with  $\beta$ -galactosidase, a 15-fold increase in fluorescence was observed with new excitation and emission maximum of 409 and 445 nm, resp. (rather than 350 and 394 as observed previously). Thus, fluorescence is proportional to ligand concentration

IT 77750-09-5P

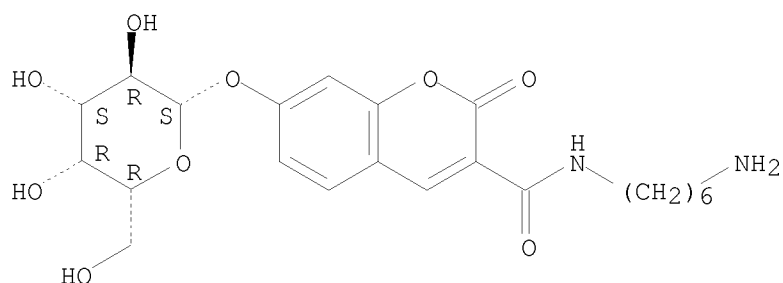
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with IgG and dimethyladipimide)

RN 77750-09-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(6-aminohexyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

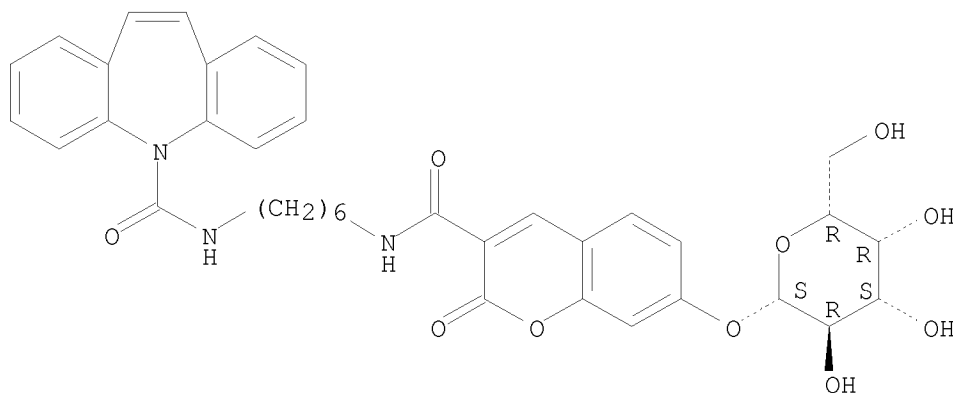
Absolute stereochemistry.



10/513699

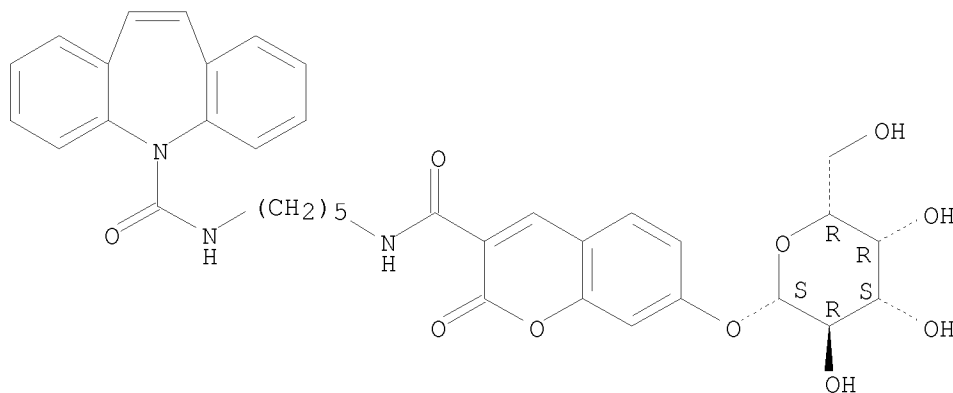
IT 79181-80-9P 79181-81-0P 79181-82-1P  
79181-83-2P 79181-84-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for carbamazepine enzyme-cleavable fluorescence  
immunoassay)  
RN 79181-80-9 CAPLUS  
CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
N-[6-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]hexyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 79181-81-0 CAPLUS  
CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
N-[5-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]pentyl]- (CA INDEX NAME)

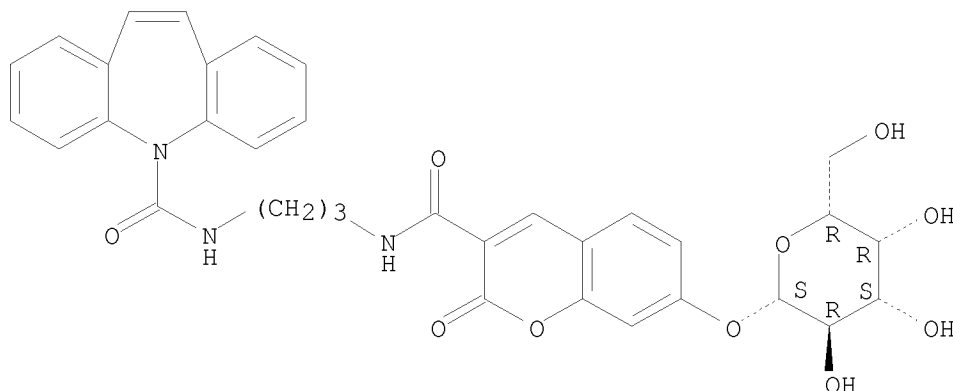
Absolute stereochemistry.



RN 79181-82-1 CAPLUS  
CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
N-[3-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]propyl]- (CA INDEX NAME)

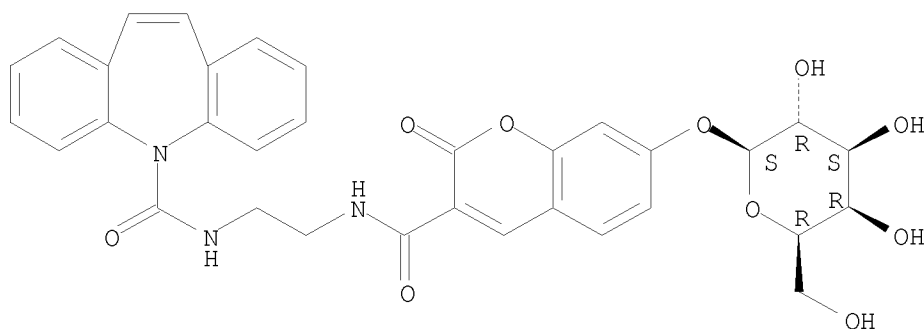
10/513699

Absolute stereochemistry.



RN 79181-83-2 CAPLUS  
CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
N-[2-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]ethyl]- (CA INDEX NAME)

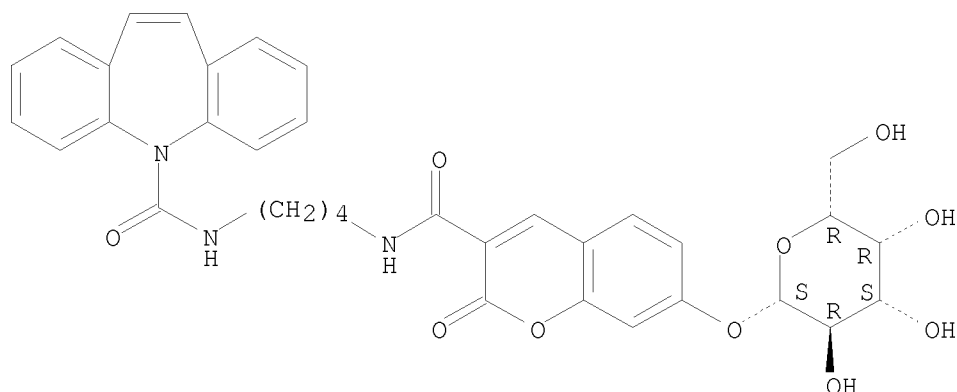
Absolute stereochemistry.



RN 79181-84-3 CAPLUS  
CN 5H-Dibenz[b,f]azepine-5-carboxamide,  
N-[4-[[[7-(β-D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]butyl]- (CA INDEX NAME)

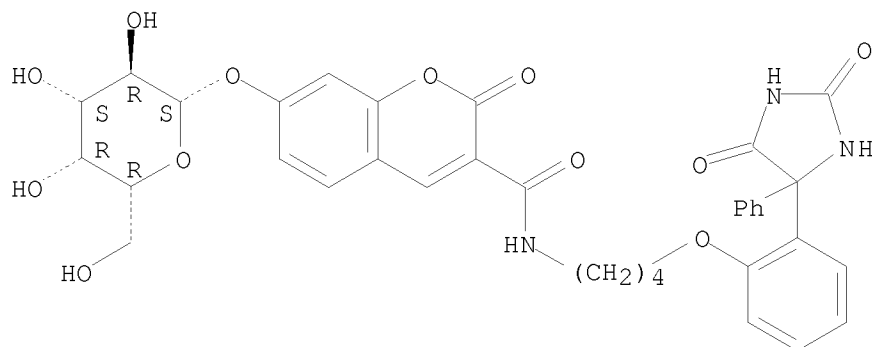
Absolute stereochemistry.

10/513699



IT 73304-29-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for diphenylhydantoin enzyme-cleavable fluorescence immunoassay)  
RN 73304-29-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[2-(2,5-dioxo-4-phenyl-4-imidazolidinyl)phenoxy]butyl]-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

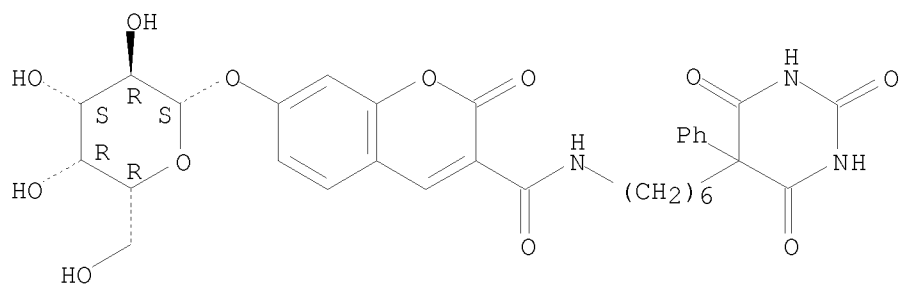
Absolute stereochemistry.



IT 79181-91-2P 79181-92-3P 79181-93-4P  
79181-94-5P 79181-95-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for phenobarbital enzyme-cleavable fluorescence immunoassay)  
RN 79181-91-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[6-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)hexyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

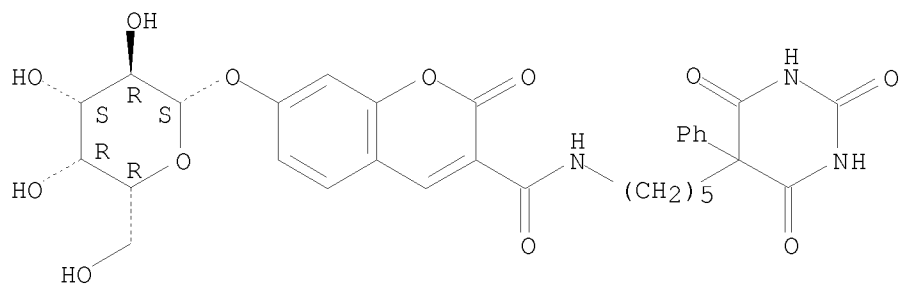
10/513699



RN 79181-92-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[5-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)pentyl]-2-oxo- (CA INDEX NAME)

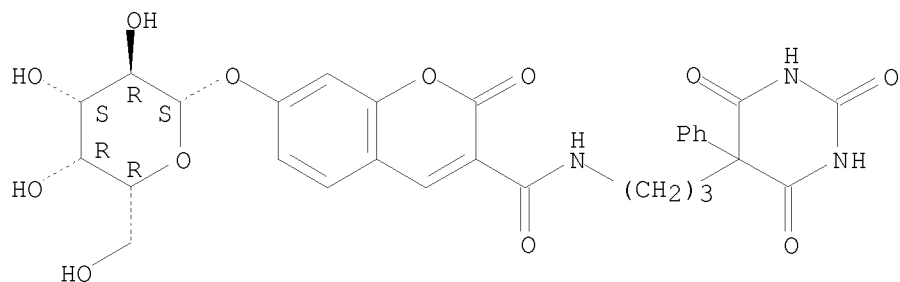
Absolute stereochemistry.



RN 79181-93-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[3-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)propyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



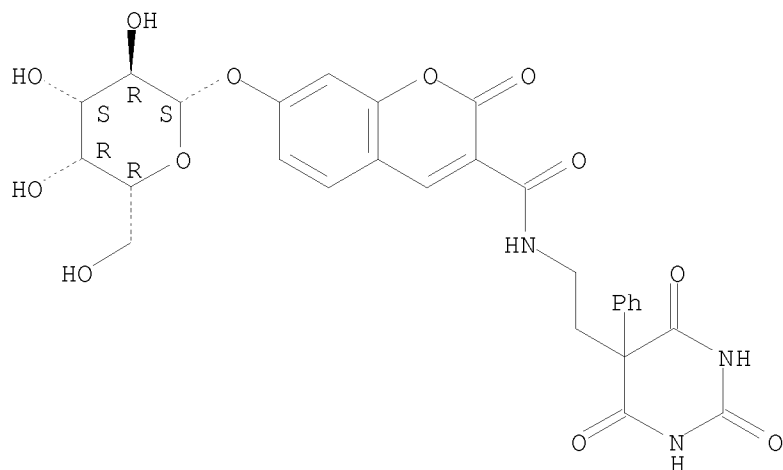
RN 79181-94-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[2-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)ethyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



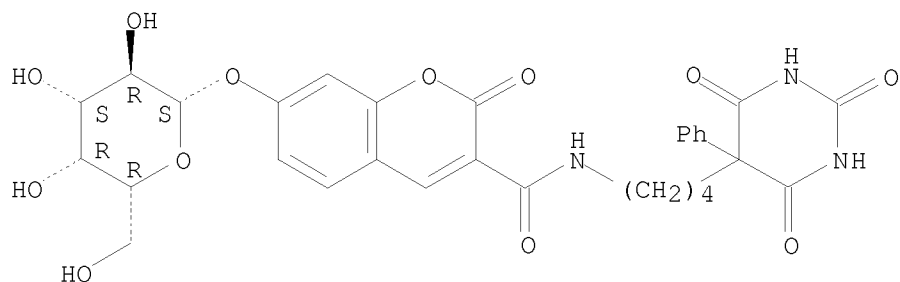
10/513699



RN 79181-95-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[4-(hexahydro-2,4,6-trioxo-5-phenyl-5-pyrimidinyl)butyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



IT 79181-71-8P 79181-72-9P 79181-73-0P  
79181-74-1P 79181-75-2P

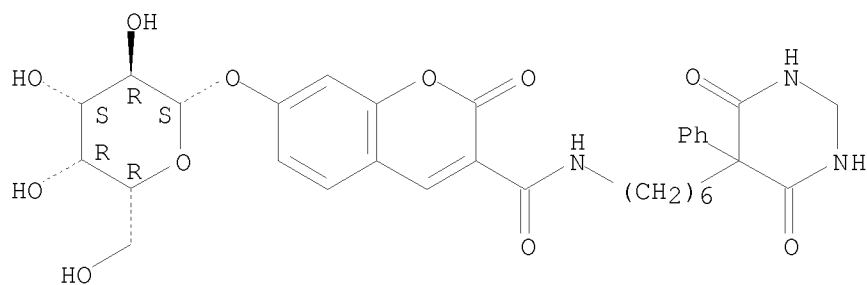
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for primidone enzyme-cleavable fluorescence immunoassay)

RN 79181-71-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[6-(hexahydro-4,6-dioxo-5-phenyl-5-pyrimidinyl)hexyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

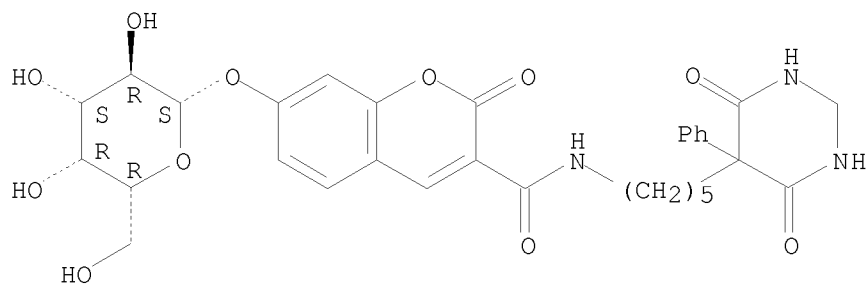
10/513699



RN 79181-72-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[5-(hexahydro-4,6-dioxo-5-phenyl-5-pyrimidinyl)pentyl]-2-oxo- (CA INDEX NAME)

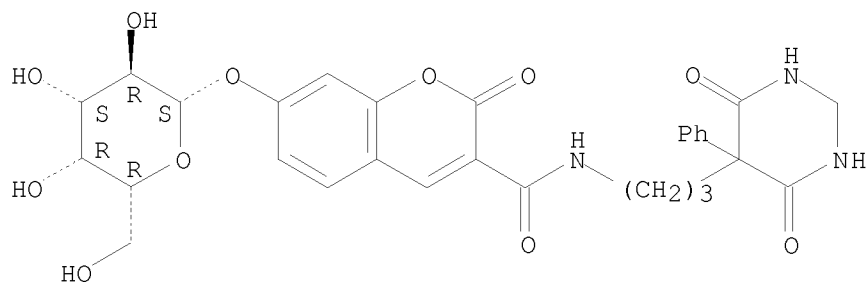
Absolute stereochemistry.



RN 79181-73-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[3-(hexahydro-4,6-dioxo-5-phenyl-5-pyrimidinyl)propyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

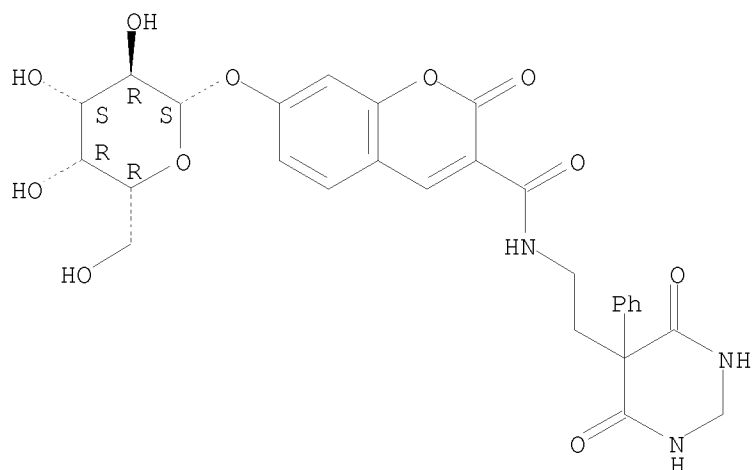


RN 79181-74-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[2-(hexahydro-4,6-dioxo-5-phenyl-5-pyrimidinyl)ethyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

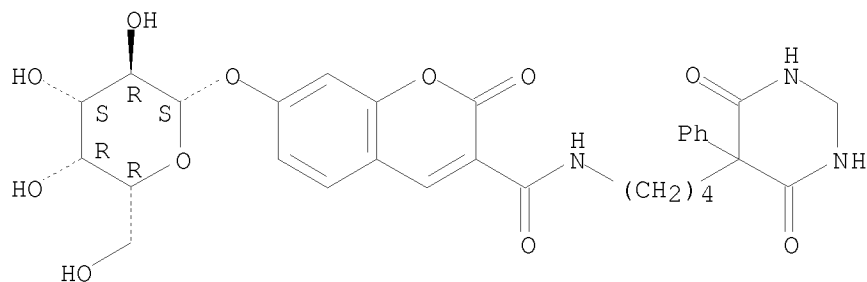
10/513699



RN 79181-75-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-N-[4-(hexahydro-4,6-dioxo-5-phenyl-5-pyrimidinyl)butyl]-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



IT 79181-86-5P 79181-87-6P 79181-88-7P  
79181-89-8P 79181-90-1P

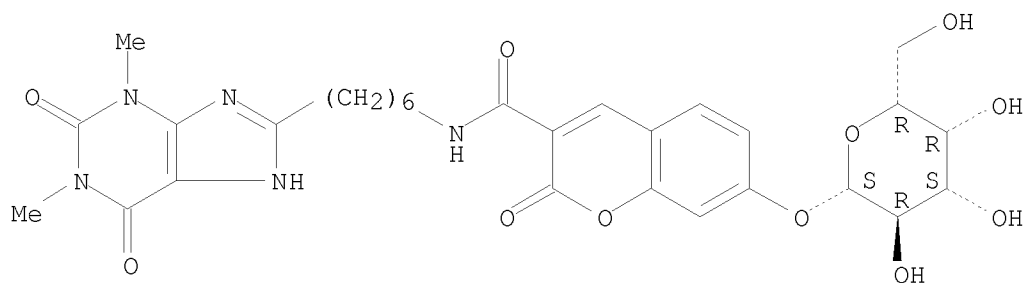
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for theophylline enzyme-cleavable fluorescence immunoassay)

RN 79181-86-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[6-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)hexyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

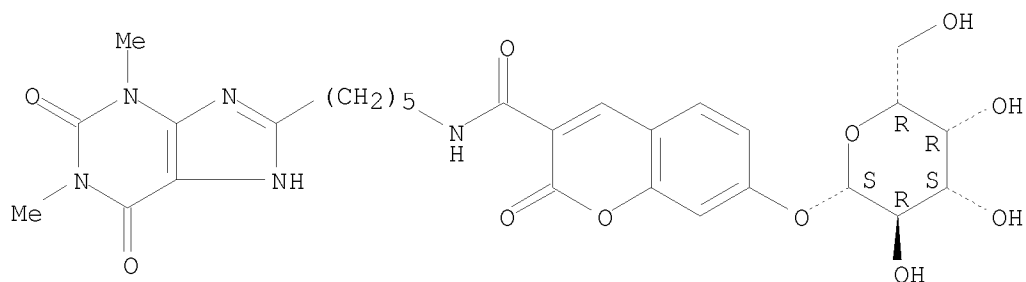
10/513699



RN 79181-87-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[5-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)pentyl]- (9CI)  
(CA INDEX NAME)

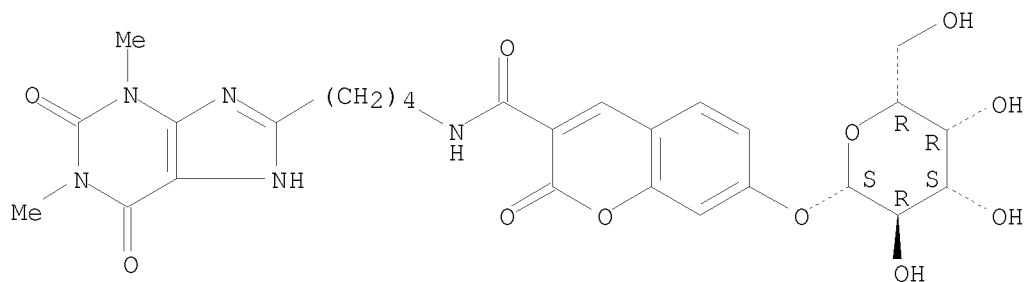
Absolute stereochemistry.



RN 79181-88-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[4-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)butyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

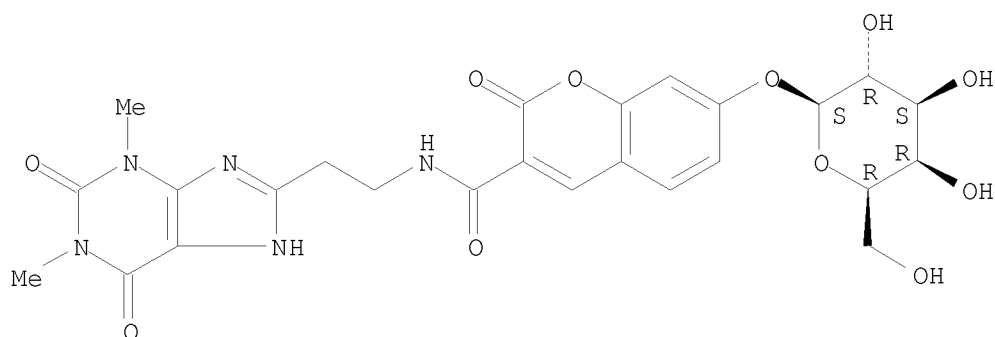


RN 79181-89-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[2-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)ethyl]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

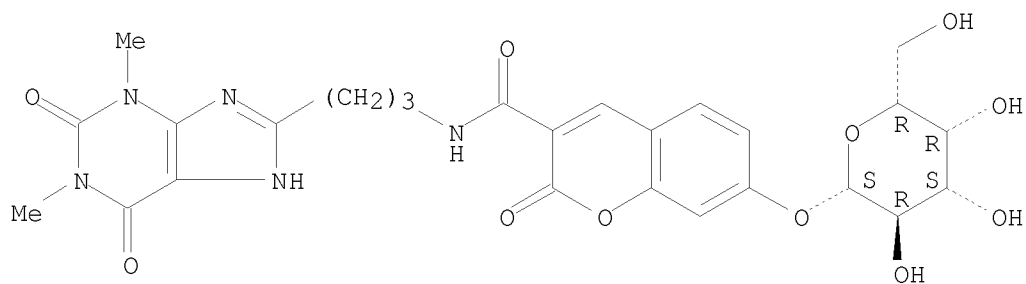
10/513699



RN 79181-90-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-(β-D-galactopyranosyloxy)-2-oxo-N-[3-(2,3,6,7-tetrahydro-1,3-dimethyl-2,6-dioxo-1H-purin-8-yl)propyl]- (9CI)  
(CA INDEX NAME)

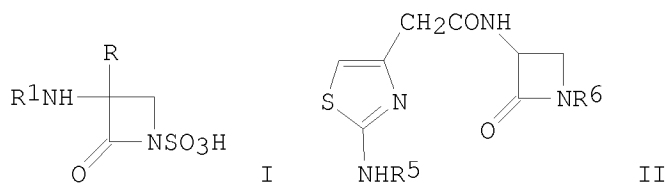
Absolute stereochemistry.



OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)

L9 ANSWER 270 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:497566 CAPLUS  
 DOCUMENT NUMBER: 95:97566  
 ORIGINAL REFERENCE NO.: 95:16387a,16390a  
 TITLE: 1-Sulpho-2-oxoazetidine derivatives and pharmaceutical compositions thereof  
 INVENTOR(S): Matsuo, Taisuke; Sugawara, Tohru; Masuya, Hirotomo; Kawano, Yasuhiko  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 194 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 21678	A1	19810107	EP 1980-301900	19800606 <--
EP 21678	B1	19841107		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
JP 55164672	A	19801222	JP 1979-72813	19790608 <--
JP 01001468	B	19890111		
JP 56133260	A	19811019	JP 1980-36366	19800322 <--
AT 10191	T	19841115	AT 1980-301900	19800606 <--
CA 1338538	C	19960820	CA 1980-353545	19800606 <--
PRIORITY APPLN. INFO.:			JP 1979-72813	A 19790608
			JP 1980-36366	A 19800322
			EP 1980-301900	A 19800606
OTHER SOURCE(S):			CASREACT 95:97566; MARPAT 95:97566	
GI				



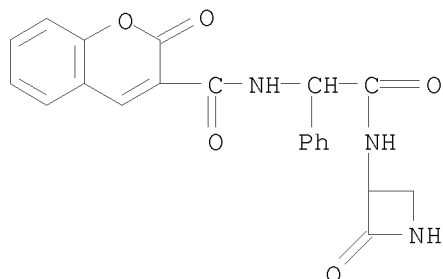
AB Bactericidal oxoazetidinesulfonates I [R = H, MeO; R<sub>1</sub> = H, acyl, protecting group, R<sub>2</sub>NHCHR<sub>3</sub>CO [R<sub>2</sub> = H, amino acid moiety, R<sub>4</sub>(CH<sub>2</sub>)<sub>n</sub>CO (R<sub>4</sub> = heterocycle, Ph, alkyl, n = 0-4), carbamoyl; R<sub>3</sub> = H, alkyl, Ph, heterocycle] and their salts were prepared. Thus, 3-amino-2-oxoazetidine was acylated by 2-(chloroacetamido)-4-thiazolylacetyl chloride in CH<sub>2</sub>Cl<sub>2</sub> containing ethylene oxide to give the thiazolylacetamidoazetidine II (R<sub>5</sub> = ClCH<sub>2</sub>CO, R<sub>6</sub> = H), which was treated with pyridine-SO<sub>3</sub> to give II (R<sub>5</sub> = ClCH<sub>2</sub>CO, R<sub>6</sub> = SO<sub>3</sub>Na). Treatment of the latter with MeNHC(S)SNa gave II (R<sub>5</sub> = H, R<sub>6</sub> = SO<sub>3</sub>Na) (III). The min. inhibitory concns. of III against Staphylococcus aureus FDA209P and Escherichia coli 0-111 were 50 and 0.39 µg/mL, resp.

IT 78625-30-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and sulfonation of)

10/513699

RN 78625-30-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[2-oxo-2-[(2-oxo-3-azetidiny)amino]-1-phenylethyl]- (CA INDEX NAME)

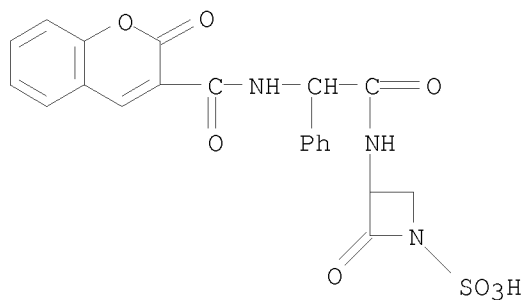


IT 78611-33-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 78611-33-3 CAPLUS

CN 1-Azetidinesulfonic acid, 2-oxo-3-[[2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-2-phenylacetyl]amino]-, sodium salt (1:1) (CA INDEX NAME)



● Na

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS  
RECORD (10 CITINGS)

L9 ANSWER 271 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:473874 CAPLUS  
 DOCUMENT NUMBER: 95:73874  
 ORIGINAL REFERENCE NO.: 95:12371a,12374a  
 TITLE: Valproic acid immunogen conjugates and antibodies thereto  
 INVENTOR(S): Buckler, Robert T.; Burd, John F.; Wong, Raphael C.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4261974	A	19810414	US 1979-93372	19791113 <--
US 4292425	A	19810929	US 1980-139716	19800414 <--
CA 1152492	A1	19830823	CA 1980-361579	19801006 <--
IL 61254	A	19831130	IL 1980-61254	19801010 <--
EP 28795	A2	19810520	EP 1980-106764	19801104 <--
EP 28795	A3	19820331		
EP 28795	B1	19850529		
R: DE, FR, GB, IT				
EP 84092	A2	19830727	EP 1982-110365	19801104 <--
EP 84092	A3	19830824		
EP 84092	B1	19850313		
R: DE, FR, GB, IT				
JP 57004550	A	19820111	JP 1980-158333	19801112 <--
JP 61027710	B	19860626		
CA 1157017	A2	19831115	CA 1982-416114	19821122 <--
PRIORITY APPLN. INFO.:			US 1979-93372	A3 19791113
			CA 1980-361579	A3 19801006
			EP 1980-106764	A 19801104

OTHER SOURCE(S): MARPAT 95:73874

AB Reagents for the determination of valproic acid [99-66-1] in liquid media such as

blood serum by immunoassay are described. The valproic acid derivative, 6-amino-2-n-propylhexanoic acid [4751-72-8] was prepared and conjugated to bovine serum albumin using dimethyladipimidate-2HCl [14620-72-5]. Rabbits were immunized with the immunogen conjugate, and antiserum against valproic acid was collected. The  $\beta$ -galactosylumbelliferone-valproic acid conjugate, N-(5-carboxyloctyl)-7- $\beta$ -galactosylcoumarin-b 3-carboxamide [78301-15-2], was prepared and used as a fluorogenic valproic acid reagent. The enzyme  $\beta$ -galactosidase was used and the fluorescence was determined at excitation and emission wavelengths 400 and 450 nm, resp. The immunoassay using this antiserum was tested; the relation between the serum valproic acid levels and fluorescence intensity was linear for concns.  $\leq 250 \mu\text{g/mL}$ .

IT 78301-15-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and as fluorogenic valproic acid reagent)

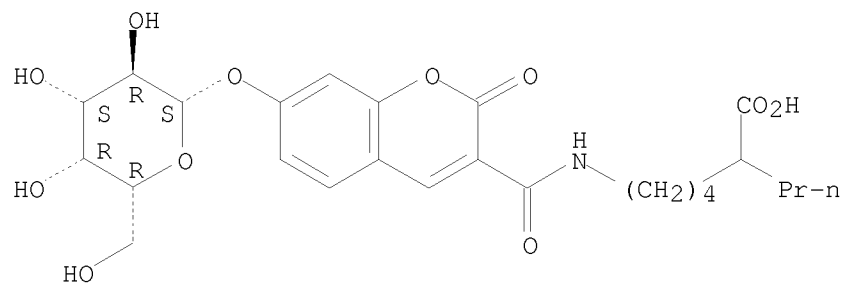
RN 78301-15-2 CAPLUS

CN Hexanoic acid, 6-[[[7-( $\beta$ -D-galactopyranosyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-2-propyl- (CA INDEX NAME)



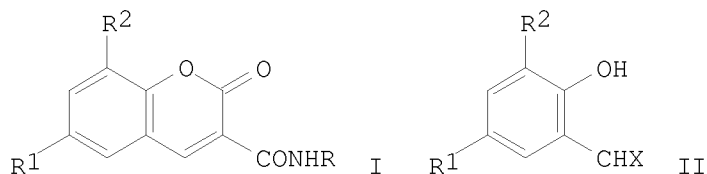
10/513699

Absolute stereochemistry.

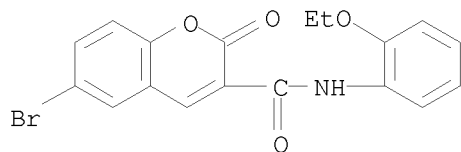


OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L9 ANSWER 272 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:424726 CAPLUS  
 DOCUMENT NUMBER: 95:24726  
 ORIGINAL REFERENCE NO.: 95:4303a,4306a  
 TITLE: Some new coumarins and Schiff's bases as possible  
 antibacterial and antifungal agents  
 AUTHOR(S): Agrawal, Mamta; Bansal, S. B.; Singhal, O. P.  
 CORPORATE SOURCE: Dep. Chem., St. John's Coll., Agra, 282 002, India  
 SOURCE: Journal of the Indian Chemical Society (1981  
 ), 58(2), 200-1  
 CODEN: JICSAH; ISSN: 0019-4522  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 95:24726  
 GI

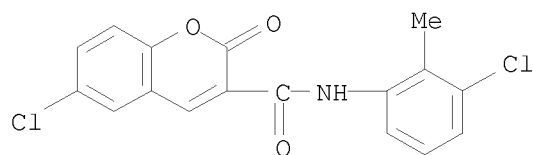


AB Coumarins I [R = 3-EtOC<sub>6</sub>H<sub>4</sub>, 2,3-MeC<sub>6</sub>H<sub>3</sub>, 2,3-(MeO)C<sub>6</sub>H<sub>3</sub>, 2-thiazolyl;  
 R<sub>1</sub>, R<sub>2</sub> = H, Cl, Br, iodo, NO<sub>2</sub>) and the Schiff bases II (X = NR) were  
 prepared by treating II (X = O) with RNHCOCH<sub>2</sub>CO<sub>2</sub>H. I (R = 2-EtOC<sub>6</sub>H<sub>4</sub>, R<sub>1</sub> =  
 Br, R<sub>2</sub> = H) was bactericidal against *Bacillus subtilis* at 6.25 µg/mL  
 and fungicidal against *Trichophyton mentagrophytes* at 50 µg/mL.  
 IT 78095-63-3P 78095-69-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation)  
 (preparation and bactericidal and fungicidal activity of)  
 RN 78095-63-3 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-ethoxyphenyl)-2-oxo- (CA  
 INDEX NAME)



RN 78095-69-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(3-chloro-2-methylphenyl)-2-oxo-  
 (CA INDEX NAME)

10/513699

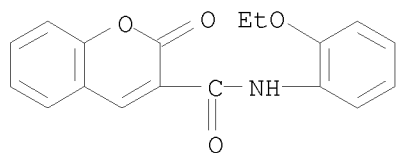


IT 78095-60-0P 78095-61-1P 78095-66-6P  
78095-67-7P 78095-68-8P 78095-71-3P  
78095-73-5P 78095-74-6P 78095-76-8P  
78095-79-1P 78095-80-4P 78095-81-5P  
78095-83-7P 78095-85-9P 78096-10-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

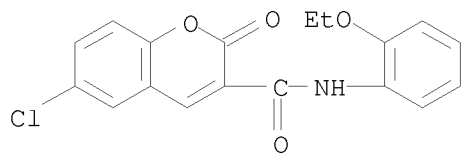
RN 78095-60-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



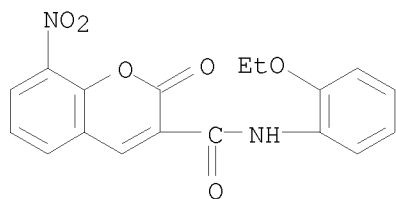
RN 78095-61-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(2-ethoxyphenyl)-2-oxo- (CA INDEX NAME)




RN 78095-66-6 CAPLUS

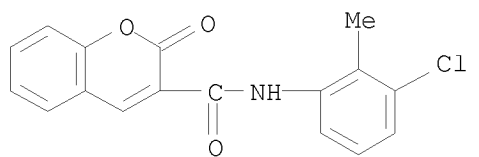
CN 2H-1-Benzopyran-3-carboxamide, N-(2-ethoxyphenyl)-8-nitro-2-oxo- (CA INDEX NAME)



RN 78095-67-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-ethoxyphenyl)-6,8-dinitro-2-oxo- (CA INDEX NAME)

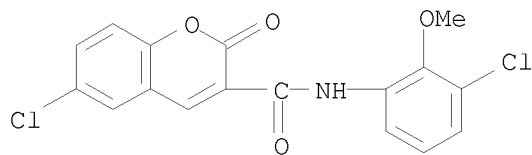
		
RN	78095-68-8	CAPLUS
CN	2H-1-Benzopyran-3-carboxamide, N-(3-chloro-2-methylphenyl)-2-oxo- (CA INDEX NAME)	

Cc1cc(Cl)ccc1NC(=O)c2cc3c(cc2Br)oc(=O)c3Cc1cc(Cl)ccc1NC(=O)c2cc3c(c2)oc(=O)c3c4ccc([N+](=O)[O-])cc4

<12/04/2007>

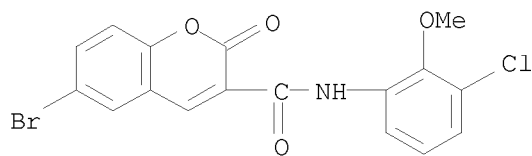
Erich Leese

10/513699



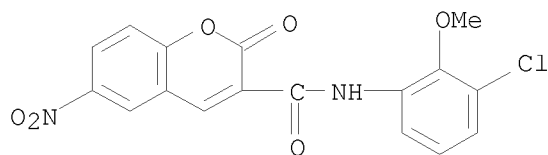
RN 78095-76-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3-chloro-2-methoxyphenyl)-2-oxo-  
(CA INDEX NAME)



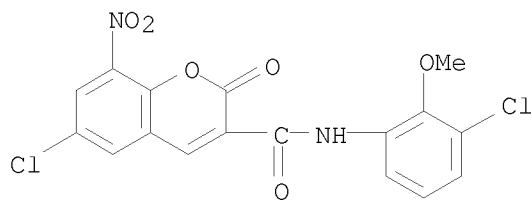
RN 78095-79-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-2-methoxyphenyl)-6-nitro-2-oxo-  
(CA INDEX NAME)



RN 78095-80-4 CAPLUS

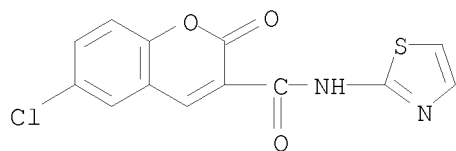
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(3-chloro-2-methoxyphenyl)-8-  
nitro-2-oxo- (CA INDEX NAME)



RN 78095-81-5 CAPLUS

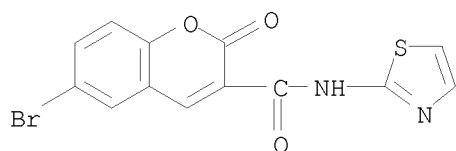
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-2-oxo-N-2-thiazolyl- (CA INDEX  
NAME)

10/513699



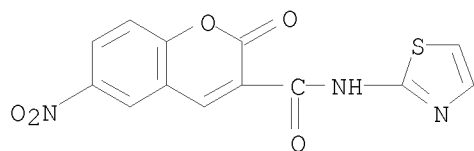
RN 78095-83-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-2-thiazolyl- (CA INDEX NAME)



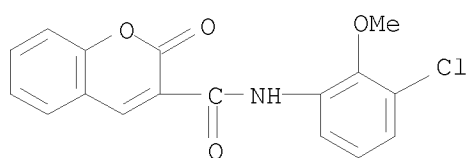
RN 78095-85-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-2-thiazolyl- (CA INDEX NAME)



RN 78096-10-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-2-methoxyphenyl)-2-oxo- (CA INDEX NAME)

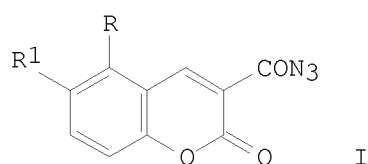


OS.CITING REF COUNT: 5

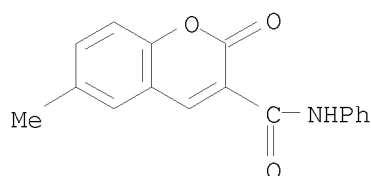
THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

10/513699

L9 ANSWER 273 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1981:423827 CAPLUS  
DOCUMENT NUMBER: 95:23827  
ORIGINAL REFERENCE NO.: 95:4147a,4150a  
TITLE: Photolysis of acyl azides leading to acyl nitrenes  
AUTHOR(S): Elkasaby, M. A.; Noureldin, N. A.  
CORPORATE SOURCE: Dep. Chem., Ain Shams Univ., Cairo, Egypt  
SOURCE: Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (1980  
, 19B(12), 1080-1  
CODEN: IJSBDB; ISSN: 0376-4699  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

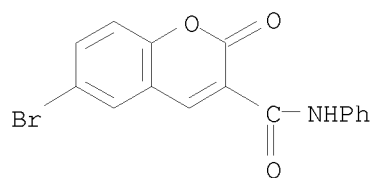


AB Photolysis of acyl azides, e.g., I (R = H, R1 = Me, Br, Cl; RR1 = benzo),  
is shown to give acyl nitrenes in the triplet state and not in the singlet  
state. The acyl nitrenes were trapped by hydrocarbons and aniline.  
IT 38485-81-3P 38485-82-4P 38485-83-5P  
38485-84-6P 38485-85-7P 38485-92-6P  
38485-93-7P 38485-94-8P 38485-98-2P  
38485-99-3P 38486-00-9P 38486-13-4P  
38486-14-5P 38543-18-9P 38543-19-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 38485-81-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo-N-phenyl- (CA INDEX NAME)

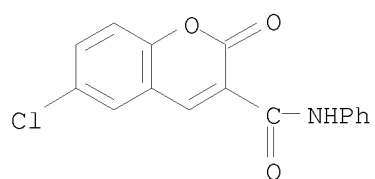


RN 38485-82-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-phenyl- (CA INDEX NAME)

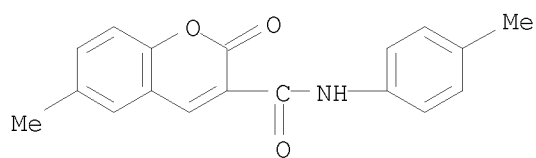
10/513699



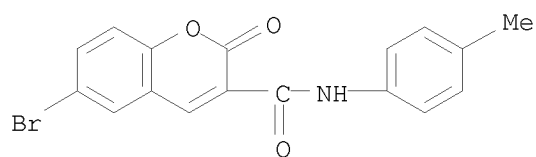
RN 38485-83-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-2-oxo-N-phenyl- (CA INDEX NAME)



RN 38485-84-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



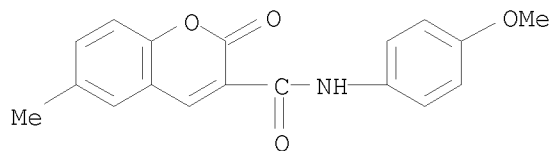
RN 38485-85-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 38485-92-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-6-methyl-2-oxo- (CA INDEX NAME)

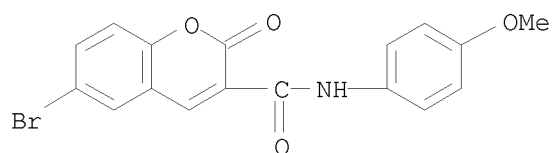


10/513699



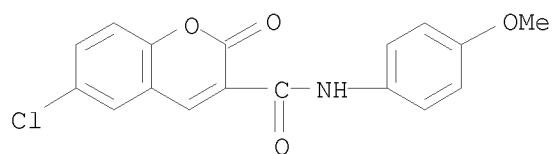
RN 38485-93-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



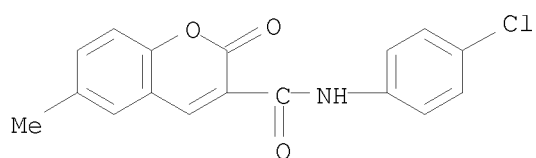
RN 38485-94-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



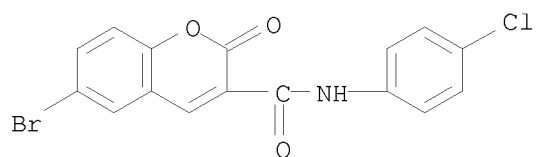
RN 38485-98-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-6-methyl-2-oxo- (CA INDEX NAME)



RN 38485-99-3 CAPLUS

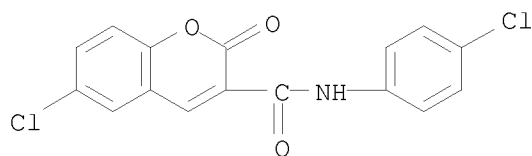
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



10/513699

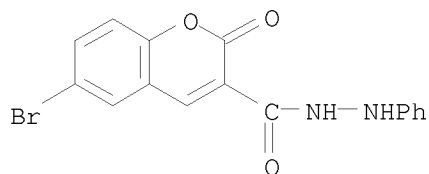
RN 38486-00-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-chlorophenyl)-2-oxo- (CA  
INDEX NAME)



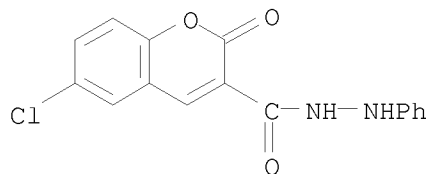
RN 38486-13-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-bromo-2-oxo-, 2-phenylhydrazide (CA  
INDEX NAME)



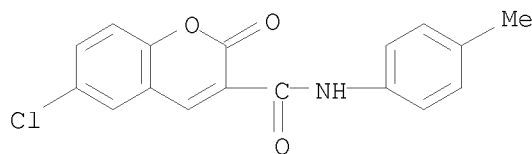
RN 38486-14-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-chloro-2-oxo-, 2-phenylhydrazide (CA  
INDEX NAME)



RN 38543-18-9 CAPLUS

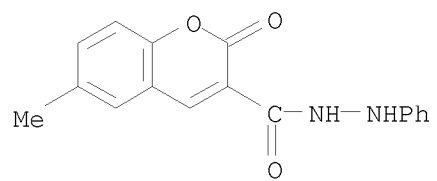
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-methylphenyl)-2-oxo- (CA  
INDEX NAME)



RN 38543-19-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-methyl-2-oxo-, 2-phenylhydrazide (CA  
INDEX NAME)

10/513699



<12/04/2007>

Erich Leese

L9 ANSWER 274 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1981:422652 CAPLUS

DOCUMENT NUMBER: 95:22652

ORIGINAL REFERENCE NO.: 95:3957a,3960a

TITLE: A homogeneous fluorescent immunoassay for human immunoglobulin M

AUTHOR(S): Worah, Dilip; Yeung, Kwok Kam; Ward, Frederick E.; Carrico, Robert J.

CORPORATE SOURCE: Corp. Chem. Dep., Miles Lab., Inc., Elkhart, IN, 46515, USA

SOURCE: Clinical Chemistry (Washington, DC, United States) (1981), 27(5), 673-7

CODEN: CLCHAU; ISSN: 0009-9147

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A homogeneous substrate-labeled fluorescent immunoassay for human IgM is described. In this competitive-binding method a fluorogenic substrate for *Escherichia coli*  $\beta$ -galactosidase, N-(6-aminohexyl)-7- $\beta$ -galactosylcoumarin-3-carboxamide is used, which is covalently coupled to IgM. The fluorescence emission intensity of the labeled IgM at 450 nm (with excitation at 400 nm) is negligible, but when  $\beta$ -galactosidase is added, the acetal linkage of the galactosyl moiety is hydrolyzed and the product has a greatly enhanced fluorescence. Formation of this fluorescent product is inhibited when antibody specific for IgM is bound to the labeled protein. In competitive-binding reactions, IgM from the serum competes with the labeled IgM for antibody binding sites and consequently the fluorescence produced by the enzymic reaction is related to the IgM concentration. The working range of the assay is 0.5-5.0 g of IgM/L when a 50-fold prediln. of the serums is used. The assay does not cross-react significantly with IgG or IgA.

IT 77750-09-5DP, reaction products with dimethyladipimide and IgM

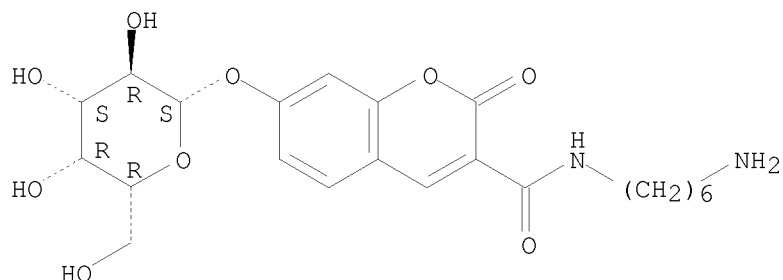
RL: PREP (Preparation)

(preparation and substrate for IgM determination)

RN 77750-09-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(6-aminohexyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 275 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1981:206920 CAPLUS

DOCUMENT NUMBER: 94:206920

ORIGINAL REFERENCE NO.: 94:33847a,33850a

TITLE: Homogeneous substrate-labeled fluorescent immunoassay for IgG in human serum

AUTHOR(S): Ngo That Tjien; Carrico, Robert J.; Boguslaski, Robert C.; Burd, John F.

CORPORATE SOURCE: Ames Res. Dev. Div., Miles Lab., Inc., Elkhart, IN, 46514, USA

SOURCE: Journal of Immunological Methods (1981), 42(1), 93-103

CODEN: JIMMBG; ISSN: 0022-1759

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Purified IgG was covalently labeled with 6-(7- $\beta$ -galactosylcoumarin-3-carboxamido)hexylamine to form a stable conjugate, GU-IgG. The galactosyl residue was hydrolyzed from GU-IgG by  $\beta$ -galactosidase and the progress of the hydrolysis was monitored by the increase in fluorescence emission at 450 nm with excitation at 400 nm. Antibody to IgG diminished the activity of GU-IgG as a substrate for  $\beta$ -galactosidase. Competitive binding immunoassays were conducted by allowing added IgG and GU-IgG to compete for a limited number of antibody binding sites. Hence, the fluorescence produced by enzymic hydrolysis increased with the level of added IgG. This method provides a simple and reliable immunoassay for IgG and is applicable to other proteins.

IT 77750-09-5D, IgG conjugates

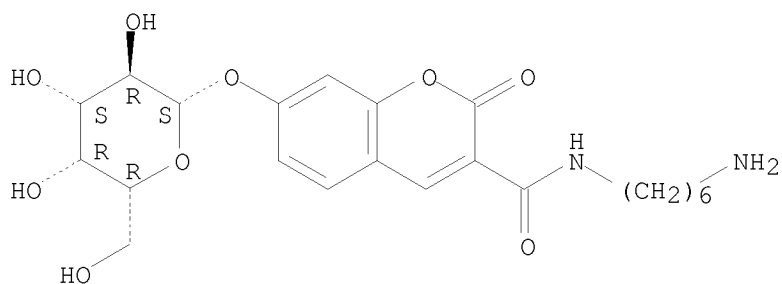
RL: BIOL (Biological study)

(in fluorescent immunoassay for IgG of blood serum)

RN 77750-09-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(6-aminohexyl)-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

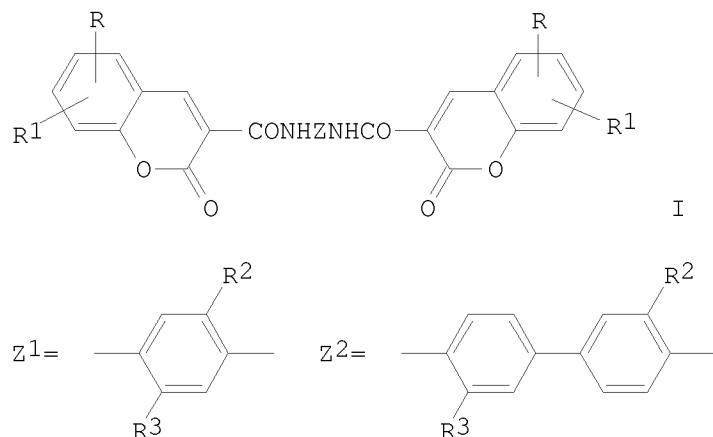
Absolute stereochemistry.



L9 ANSWER 276 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:141201 CAPLUS  
 DOCUMENT NUMBER: 94:141201  
 ORIGINAL REFERENCE NO.: 94:23131a,23134a  
 TITLE: Organic pigments derived from coumarin  
 INVENTOR(S): Bingham, Richard C.  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA  
 SOURCE: U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 877,462,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4240967	A	19801223	US 1979-65863	19790813 <--
GB 2014180	A	19790822	GB 1979-4633	19790209 <--
GB 2014180	B	19820630		
CA 1121822	A1	19820413	CA 1979-321189	19790209 <--
PRIORITY APPLN. INFO.:			US 1978-877462	A2 19780213
			CA 1979-321189	A 19790209
			GB 1979-4633	A 19790209
			US 1978-898443	A 19780420

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 GI



AB Yellow to orange pigments with general structure I are prepared, where R = H, C1-4 alkyl, C1-4 alkoxy, Cl or Br, R1 = H, C1-4 alkyl, C1-4 alkoxy, Cl, Br or NO2, and Z = Z1 or Z2 (R2,R3 = H, C1-4 alkyl, C1-4 alkoxy, Cl, Br). I exhibit good bleedfastness and durability. Thus, condensation of coumarin-3-carbonyl chloride [3757-06-0] with 2-chloro-p-phenylenediamine [615-66-7] in Dowtherm at 100° gave yellow I(R = R1 = R2 = H, R3 = Cl, Z = Z1) (II) [71942-47-7]. In outdoor exposure tests, II dispersed in thermoplastic acrylic lacquer paint showed better durability

10/513699

than Irgazin Yellow 2GLT. In bleedfastness tests, no migration of II from the paint into a white overstripe was detected.

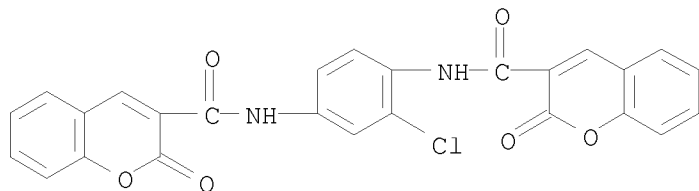
IT 71942-47-7

RL: USES (Uses)

(pigment, for coatings, manufacture of)

RN 71942-47-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-(2-chloro-1,4-phenylene)bis[2-oxo- (9CI) (CA INDEX NAME)



IT 71942-46-6P

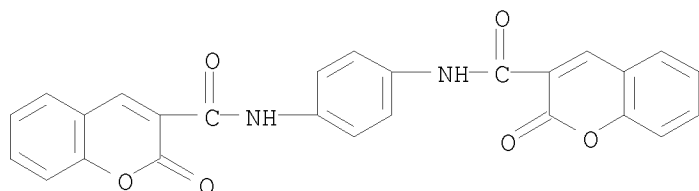
71942-49-9P

RL: IMF (Industrial manufacture); PREP (Preparation)

(pigment, manufacture of)

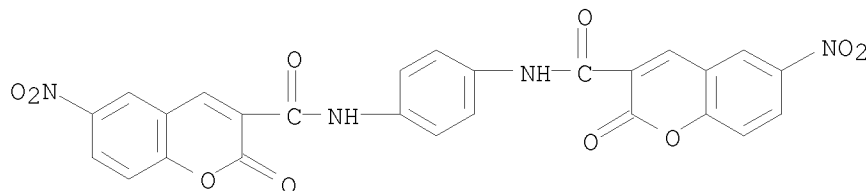
RN 71942-46-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[2-oxo- (CA INDEX NAME)



RN 71942-49-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[6-nitro-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 3

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 277 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1981:41505 CAPLUS  
 DOCUMENT NUMBER: 94:41505  
 ORIGINAL REFERENCE NO.: 94:6665a,6668a  
 TITLE:  $\beta$ -Galactosyl-umbelliferone-labeled aminoglycoside  
 antibiotics and intermediates  
 INVENTOR(S): Boguslaski, Robert C.; Carrico, Robert J.; Burd, John  
 F.  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: U.S., 21 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 4226978	A	19801007	US 1978-886094	19780313 <--
CA 1133474	A1	19821012	CA 1979-320897	19790206 <--
US 4279992	A	19810721	US 1979-87819	19791023 <--
US 4331590	A	19820525	US 1980-147339	19800506 <--
US 4404366	A	19830913	US 1981-284137	19810716 <--
CA 1148080	A2	19830614	CA 1982-396228	19820212 <--
PRIORITY APPLN. INFO.:			US 1978-886094	A 19780313
			CA 1979-320897	A3 19790206
			US 1979-87819	A3 19791023
			US 1980-147339	A3 19800506

OTHER SOURCE(S): CASREACT 94:41505; MARPAT 94:41505

AB The title compds. were prepared for use in improved nonradioisotopic binding assay of the resp. antibiotics in plasma or serum using a novel enzyme substrate label. The assay method features the advantages of involving a cleaving enzyme for which negligible, if any, endogenous activity is found in physiol. fluids such as serum and plasma, and of employing a labeled conjugate wherein the cleavable linkage is very stable under assay conditions in the absence of the enzyme. The usefulness was demonstrated with  $\beta$ -galactosylumbelliferonesisomycin prepared by mixing K  $\beta$ -[7-(3-carboxycoumarinyl)oxy]-D-galactoside [64662-11-9] with sisomycin sulfate [53179-09-2]. The enzyme was Escherichia coli  $\beta$ -galactosidase. The absorbance spectrum showed a maximum at 345 nm. Endogenous enzyme activity of a serum sample and antibody-induced hydrolysis of the cleavable linkage were not a source of potential error, and no background hydrolysis of the labeled conjugate was observed

IT 73304-29-7P

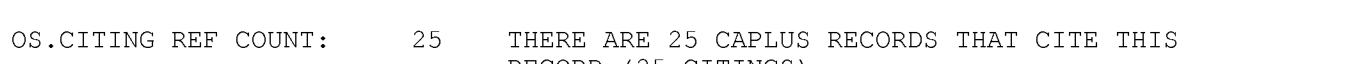
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for aminoglycoside antibiotic determination in blood)

RN 73304-29-7 CAPLUS

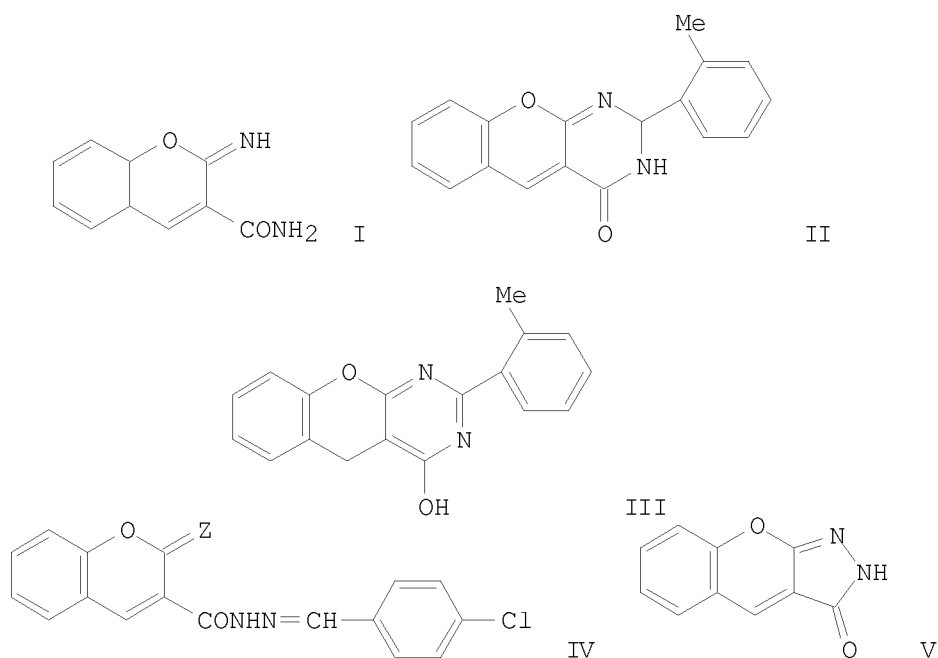
CN 2H-1-Benzopyran-3-carboxamide, N-[4-[2-(2,5-dioxo-4-phenyl-4-imidazolidinyl)phenoxy]butyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.





L9 ANSWER 278 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1980:620682 CAPLUS  
 DOCUMENT NUMBER: 93:220682  
 ORIGINAL REFERENCE NO.: 93:35238h,35239a  
 TITLE: Isomerization of  
 2-aryl-4-oxo-2,3-dihydrobenzopyrano[2,3-d]pyrimidines  
 to 2-aryl-4-hydroxy-5H-benzopyrano[2,3-d]pyrimidines  
 AUTHOR(S): O'Callaghan, Conor N.  
 CORPORATE SOURCE: Lab. Med. Res. Counc. Ireland, Trinity Coll., Dublin,  
 2, Ire.  
 SOURCE: Journal of the Chemical Society, Perkin Transactions  
 1: Organic and Bio-Organic Chemistry (1972-1999) (1980), (6), 1335-7  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 93:220682  
 GI



AB The base catalyzed cyclocondensation reaction of  
 3-carbamoyl-2-iminochromene derivs. with aromatic aldehydes gave unstable  
 2-aryl-4-oxo-2,3-dihydrobenzopyrano[2,3-d]pyrimidines which isomerized to  
 stable 2-aryl-4-hydroxy-5H-benzopyrano[2,3-d]pyrimidines. E.g., the  
 iminochromenecarboxamide I underwent base catalyzed cyclocondensation with  
 2-MeC<sub>6</sub>H<sub>4</sub>CHO to give the oxodihydrobenzopyranopyrimidine II, which  
 isomerized to the hydroxybenzopyranopyrimidine III. The carbohydrazine IV  
 (Z = NH) reacted with H<sub>2</sub>NOH.HCl to give IV (X = NOH), which cyclized to  
 the benzopyranopyrazolone V. The oxodihydrobenzopyranopyrimidines are

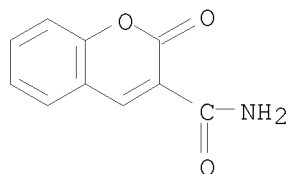
10/513699

useful as antitumor agents (no data).

IT 1846-78-2P 30866-42-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

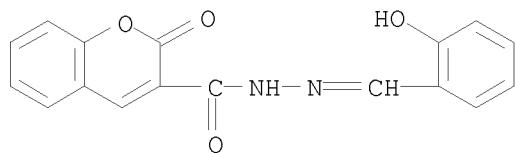
RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



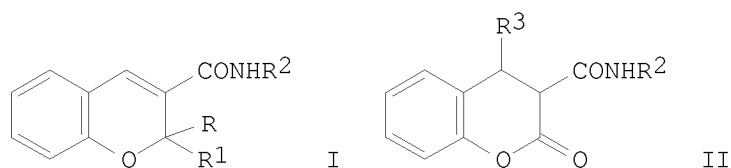
RN 30866-42-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(2-hydroxyphenyl)methylene]hydrazide (CA INDEX NAME)

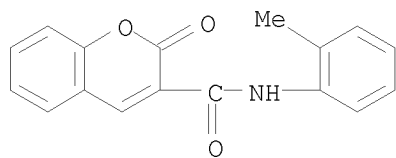


OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

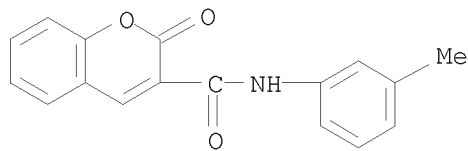
L9 ANSWER 279 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1980:620536 CAPLUS  
 DOCUMENT NUMBER: 93:220536  
 ORIGINAL REFERENCE NO.: 93:35206h,35207a  
 TITLE: Action of Grignard reagents on 1-benzopyran-2(H)-ones  
 AUTHOR(S): Islam, A. M.; El-Sharief, A. M. S.; Bedair, A. H.;  
 Ibrahim, E. H.; Aly, F. M.; El-Masry, F. M.  
 CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1979  
 ), 17B(6), 630-2  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 93:220536  
 GI



AB Treating title benzopyranones I (RR1 = O, R2 = Ph, o-, m-, p-MeC6H4, 4-ClC6H4) with Grignard reagents gave 3,4-dihydro-1-benzopyran-2H-ones (II; R3 = Ph, PhCH2, allyl, Et, Bu, Me2CHCH2, Me3C) by 1,4-addition and 2-hydroxybenzopyrans (I; R = OH, R1 = Ph) by 1,2-addition  
 IT 1846-98-6      1846-99-7      1847-00-3  
 1847-02-5      54396-25-7      72788-19-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Grignard reactions of)  
 RN 1846-98-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)



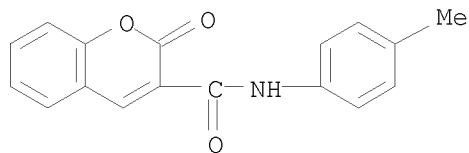
RN 1846-99-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)



10/513699

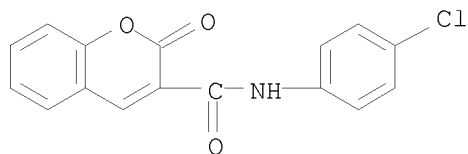
RN 1847-00-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



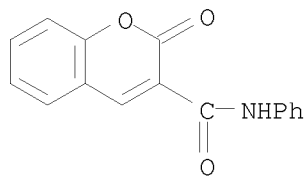
RN 1847-02-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



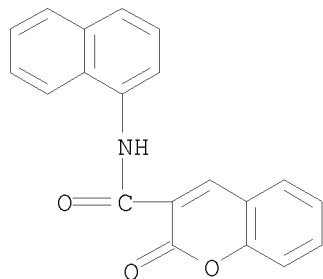
RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 72788-19-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-1-naphthalenyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1

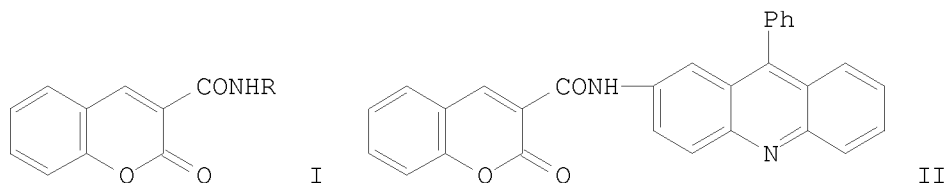
THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

10/513699

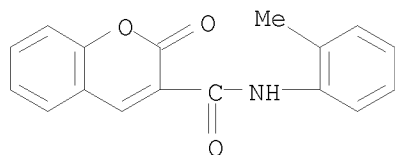
L9 ANSWER 280 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1980:495087 CAPLUS  
DOCUMENT NUMBER: 93:95087  
ORIGINAL REFERENCE NO.: 93:15237a,15240a  
TITLE: Synthesis and reactions of  
coumarin-3-N-bromoarylcaboxamides  
AUTHOR(S): Islam, A. M.; Bedair, A. H.; Aly, F. M.; El-Sharief,  
A. M.; El-Masry, F. M.  
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
SOURCE: Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (1980  
) , 19B(3), 224-7  
CODEN: IJSBDB; ISSN: 0376-4699  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 93:95087  
GI



AB Various (bromoaryl)coumarincaboxamides I (R = 4-BrC<sub>6</sub>H<sub>4</sub>, 4,2-, 4,3-, or 2,4-BrMeC<sub>6</sub>H<sub>3</sub>, 4,2- or 2,4-BrClC<sub>6</sub>H<sub>3</sub>, 4-bromo-, and 4,7-dibromonaphthyl) were prepared by bromination of the corresponding arylcoumarins. I reacted with aliphatic amines and hydrazines. Some acridinyl derivs., e.g. II, were prepared from I (R = p-PhNHC<sub>6</sub>H<sub>4</sub>).

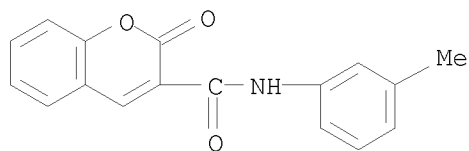
IT 1846-98-6 1846-99-7 1847-00-3  
1847-02-5 54396-25-7 72788-19-3  
74556-29-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(bromination of)

RN 1846-98-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)

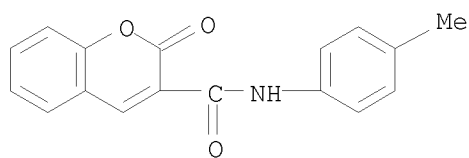


RN 1846-99-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)

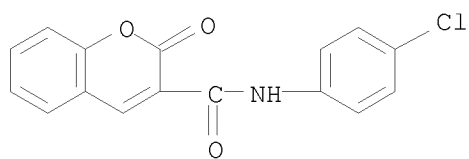
10/513699



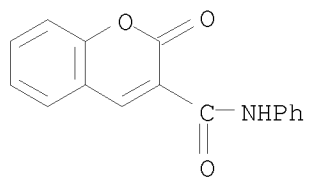
RN 1847-00-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 1847-02-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)

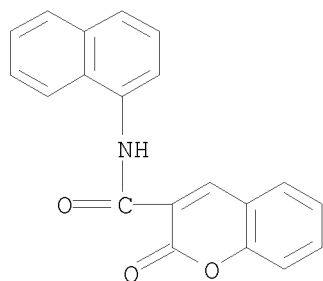


RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

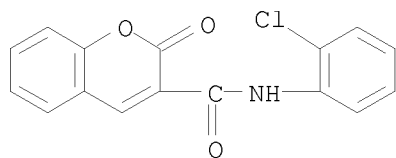


RN 72788-19-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-1-naphthalenyl-2-oxo- (CA INDEX NAME)

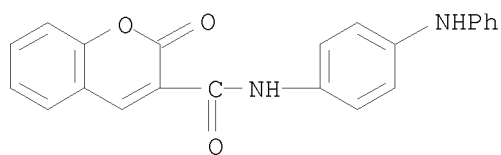
10/513699



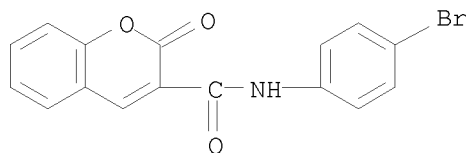
RN 74556-29-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-2-oxo- (CA INDEX NAME)



IT 74556-23-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction with acid chlorides)  
RN 74556-23-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-(phenylamino)phenyl]- (CA INDEX NAME)



IT 74555-99-0P 74556-00-6P 74556-01-7P  
74556-02-8P 74556-25-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction with amines)  
RN 74555-99-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromophenyl)-2-oxo- (CA INDEX NAME)

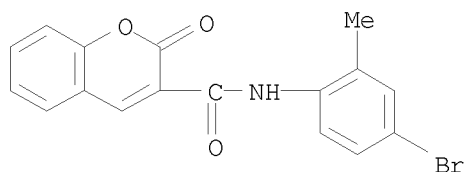




10/513699

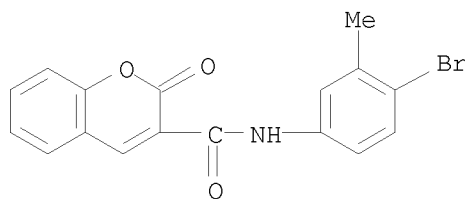
RN 74556-00-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-2-methylphenyl)-2-oxo- (CA INDEX NAME)



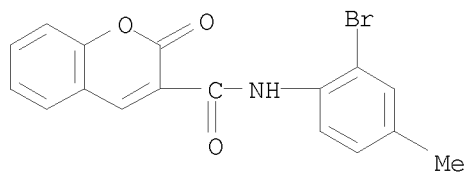
RN 74556-01-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-bromo-3-methylphenyl)-2-oxo- (CA INDEX NAME)



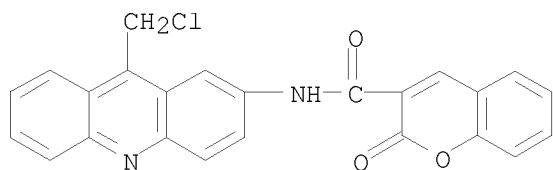
RN 74556-02-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-bromo-4-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 74556-25-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[9-(chloromethyl)-2-acridinyl]-2-oxo- (CA INDEX NAME)



IT 74556-24-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

<12/04/2007>

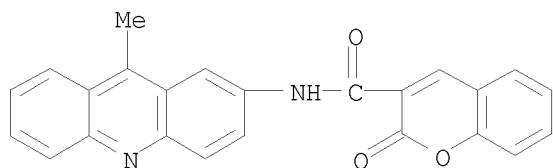
Erich Leese

10/513699

(preparation and reaction with benzaldehyde)

RN 74556-24-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(9-methyl-2-acridinyl)-2-oxo- (CA INDEX NAME)

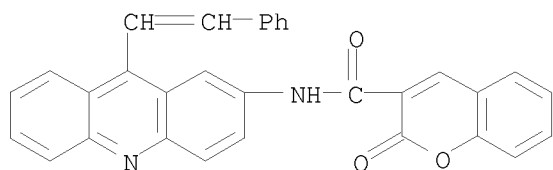


IT 74556-26-6P 74556-27-7P 74556-28-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

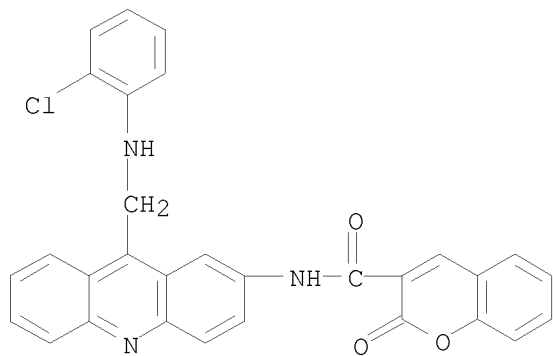
RN 74556-26-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[9-(2-phenylethenyl)-2-acridinyl]-  
(CA INDEX NAME)



RN 74556-27-7 CAPLUS

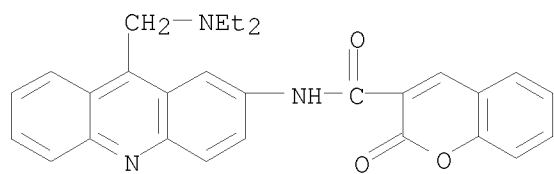
CN 2H-1-Benzopyran-3-carboxamide, N-[9-[(2-chlorophenyl)amino]methyl]-2-acridinyl]-2-oxo- (CA INDEX NAME)



RN 74556-28-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[9-[(diethylamino)methyl]-2-acridinyl]-2-oxo- (CA INDEX NAME)

10/513699

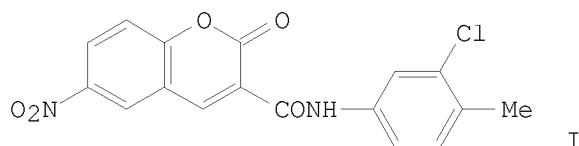


<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 281 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1980:420623 CAPLUS  
DOCUMENT NUMBER: 93:20623  
ORIGINAL REFERENCE NO.: 93:3454h,3455a  
TITLE: Coumarins as potential seed germination inhibitors  
AUTHOR(S): Bux, M.; Jolly, V. S.  
CORPORATE SOURCE: Chem. Lab., Maharaja Coll., Chhatarpur, 471001, India  
SOURCE: Journal of the Institution of Chemists (India) (1980), 52(1), 35-6  
CODEN: JOICA7; ISSN: 0020-3254  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



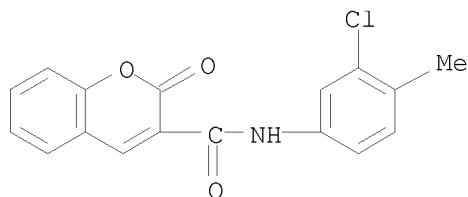
AB Application of 1000 ppm 6-nitrocoumarin-3-carboxy-3'-chloro-4-methylanilide (I) [73876-95-6], prepared by the condensation of 3-chloro-4-methylmalonanilic acid [73877-03-9] with salicylaldehyde [90-02-8] to seeds of Paspalum serobiculatum allowed only 2% germinations as compared with 80% germination for the inhibitor coumarins. The synthesis and seed germination inhibiting activities of 9 other coumarins are reported.

IT 73876-93-4P 73876-94-5P 73876-95-6P  
73876-96-7P 73876-97-8P 73876-99-0P  
73877-01-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and seed germination inhibition by)

RN 73876-93-4 CAPLUS

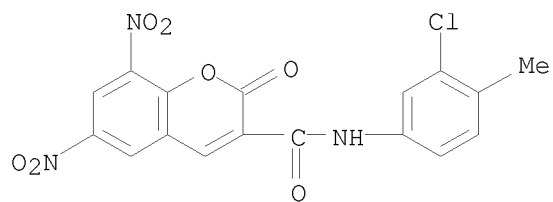
CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-4-methylphenyl)-2-oxo- (CA INDEX NAME)



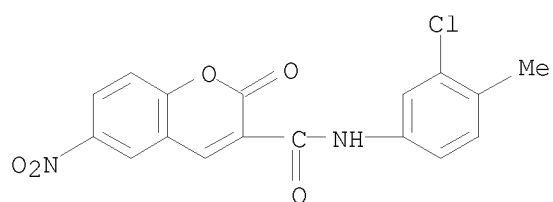
RN 73876-94-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-4-methylphenyl)-6,8-dinitro-2-oxo- (CA INDEX NAME)

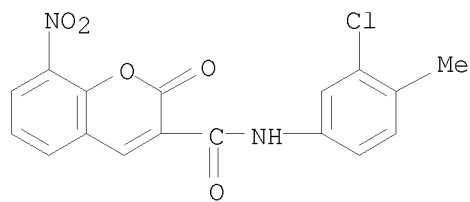
10/513699



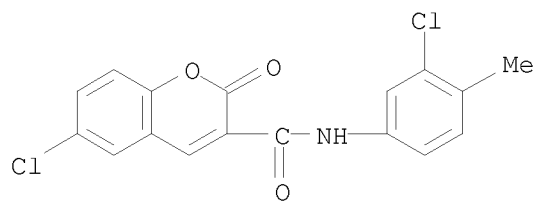
RN 73876-95-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-4-methylphenyl)-6-nitro-2-oxo-  
(CA INDEX NAME)



RN 73876-96-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-4-methylphenyl)-8-nitro-2-oxo-  
(CA INDEX NAME)

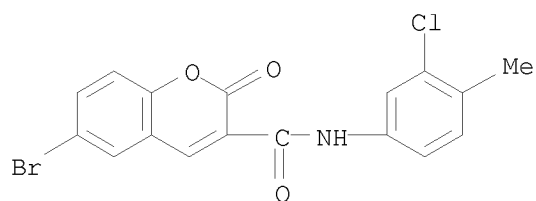


RN 73876-97-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(3-chloro-4-methylphenyl)-2-oxo-  
(CA INDEX NAME)



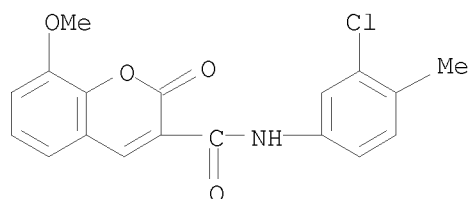
RN 73876-99-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3-chloro-4-methylphenyl)-2-oxo-  
(CA INDEX NAME)

10/513699



RN 73877-01-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chloro-4-methylphenyl)-8-methoxy-2-oxo-  
(CA INDEX NAME)



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

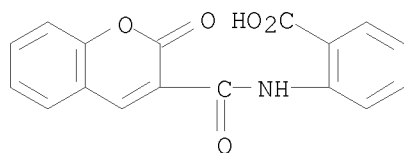
L9 ANSWER 282 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1980:408105 CAPLUS  
 DOCUMENT NUMBER: 93:8105  
 ORIGINAL REFERENCE NO.: 93:1487a,1490a  
 TITLE: Synthesis of some 3  
 (3',1'-benzoxazin-4'-one)-6-substituted coumarins and  
 their chemical reactions  
 AUTHOR(S): Abdalla, M. M.; Elkady, M.; El-Farargy, A. F.  
 CORPORATE SOURCE: Fac. Sci., Zagazig Univ., Cairo, Egypt  
 SOURCE: Egyptian Journal of Chemistry (1979), Volume  
 Date 1977, 20(3), 245-57  
 CODEN: EGJCA3; ISSN: 0367-0422  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 93:8105  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Phenylcarbamoylcoumarins I (R = H, Br; R1 = OH) cyclized in refluxing Ac2O to give the benzoxazinones II. Treatment of II (R = H) with amines gave I (R = H; R1 = NH2, PhCH2NH, PhNH, BuNH, 4-MeOC6H4NH, 4-MeC6H4NH), whereas treatment of II (R = H) with N2H4 in EtOH at room temperature gave the dihydrazide III. Grignard reaction of II (R = H, Br) with R2Br (R2 = Me, Et, Ph, 2-MeC6H4, 4-MeC6H4, 4-MeOC6H4) gave the trisubstituted benzopyranylbenzoxazines IV. Friedel-Crafts reaction of II (R = H, Br) with aromatic hydrocarbons gave the dihydrocoumarins V (R3 = H, Me, Cl, Et, Me2CH).

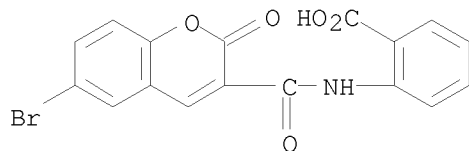
IT 73877-78-8P 73877-79-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclocondensation reaction of)

RN 73877-78-8 CAPLUS  
 CN Benzoic acid, 2-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



RN 73877-79-9 CAPLUS  
 CN Benzoic acid, 2-[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)

10/513699

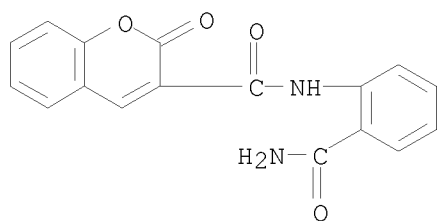


IT 73877-82-4P 73877-83-5P 73877-84-6P  
73877-85-7P 73877-86-8P 73877-87-9P  
73892-26-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

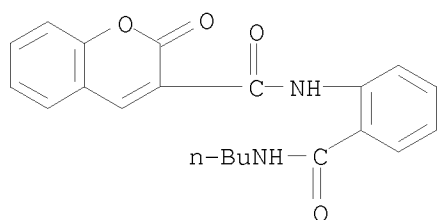
RN 73877-82-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(aminocarbonyl)phenyl]-2-oxo- (CA  
INDEX NAME)



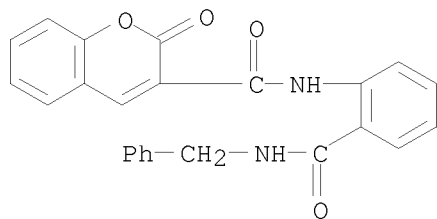
RN 73877-83-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[(butylamino)carbonyl]phenyl]-2-oxo-  
(CA INDEX NAME)



RN 73877-84-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[2-  
[[ (phenylmethyl) amino] carbonyl] phenyl]- (CA INDEX NAME)

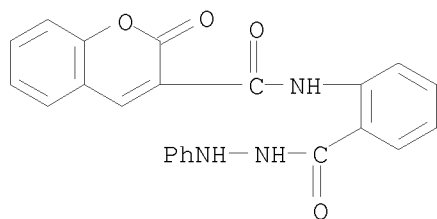




10/513699

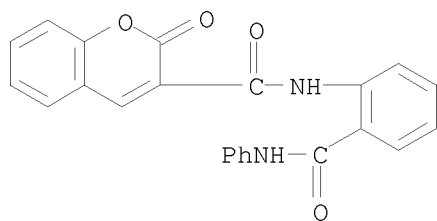
RN 73877-85-7 CAPLUS

CN Benzoic acid, 2-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-,  
2-phenylhydrazide (CA INDEX NAME)



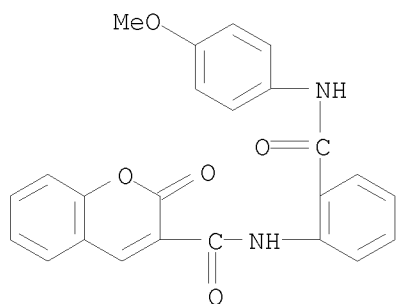
RN 73877-86-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[2-[(phenylamino)carbonyl]phenyl]-  
(CA INDEX NAME)



RN 73877-87-9 CAPLUS

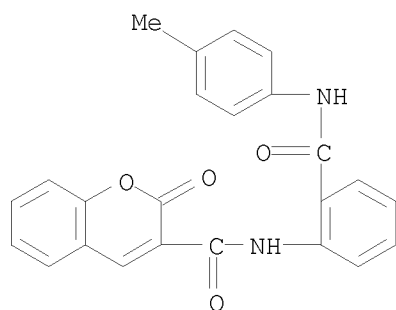
CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[ (4-methoxyphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)



RN 73892-26-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-[[ (4-methylphenyl)amino]carbonyl]phenyl]-2-oxo- (CA INDEX NAME)

10/513699

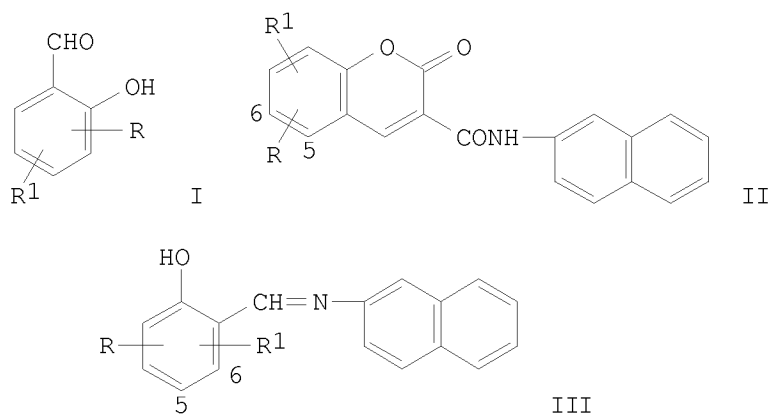


OS.CITING REF COUNT: 6

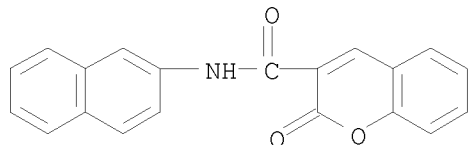
THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD  
(6 CITINGS)

10/513699

L9 ANSWER 283 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1980:407952 CAPLUS  
DOCUMENT NUMBER: 93:7952  
ORIGINAL REFERENCE NO.: 93:1451a,1454a  
TITLE: Some new coumarins and benzocoumarin from  
N- $\beta$ -naphthyl malonamic acid and salicylaldehyde,  
substituted salicylaldehydes and  
2-hydroxy-1-naphthaldehyde  
AUTHOR(S): Seth, D. S.; Banerji, B. C.  
CORPORATE SOURCE: Dep. Chem., St. John's Coll., Agra, India  
SOURCE: Agra University Journal of Research, Science (  
1979), Volume Date 1978, 27(2), 107-10  
CODEN: AURSA9; ISSN: 0002-1032  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI

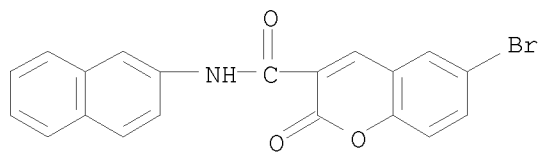


AB Cyclocondensation of salicylaldehydes I (R, R1 = H, halo, NO2, MeO) with  
N- $\beta$ -naphthylmalonamic acid in the presence of pyridine catalyst gave  
33.2-43% coumarins II and 12.4-37% Schiff bases III. II (RR1 =  
5,6-CH:CHCH:CH) and III (RR1 = 5,6-CH:CHCH:CH) were analogously prepared  
IT 1847-06-9P 38486-08-7P 38486-09-8P  
73930-51-5P 73941-65-8P 73941-66-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 1847-06-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



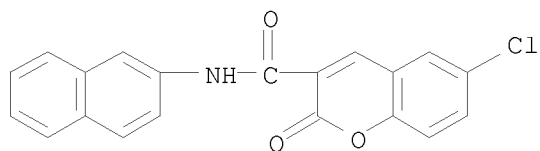
RN 38486-08-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)

10/513699



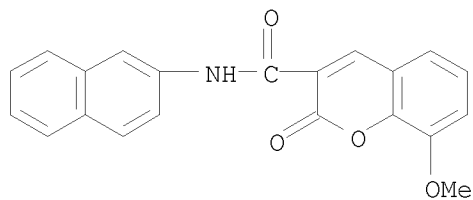
RN 38486-09-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



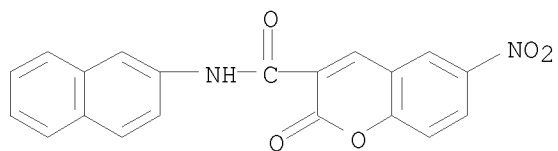
RN 73930-51-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



RN 73941-65-8 CAPLUS

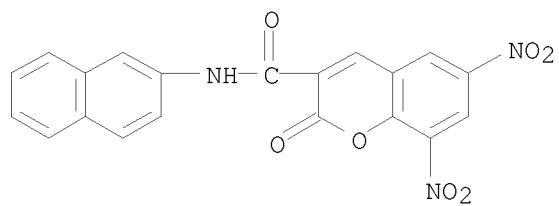
CN 2H-1-Benzopyran-3-carboxamide, N-2-naphthalenyl-6-nitro-2-oxo- (CA INDEX NAME)



RN 73941-66-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-2-naphthalenyl-6,8-dinitro-2-oxo- (CA INDEX NAME)

10/513699

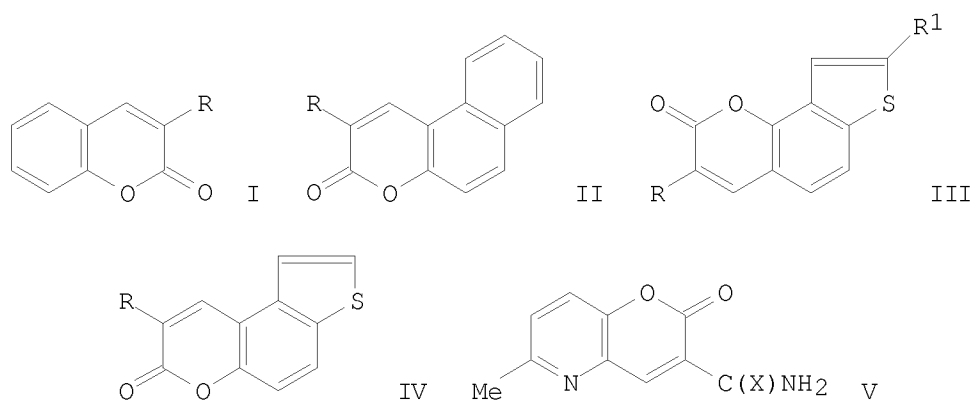


OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 284 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1980:214410 CAPLUS  
 DOCUMENT NUMBER: 92:214410  
 ORIGINAL REFERENCE NO.: 92:34719a,34722a  
 TITLE: Mass spectra of some 3-substituted coumarins  
 AUTHOR(S): Saint-Ruf, Germain; De, Asish; Brunskill, John S. A.;  
 Jeffrey, Howard  
 CORPORATE SOURCE: Cent. Marcel Delepine, CNRS, Orleans, 45045, Fr.  
 SOURCE: Journal of Heterocyclic Chemistry (1980),  
 17(1), 81-6  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



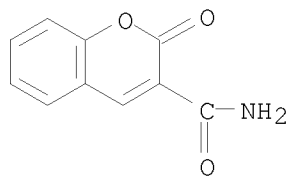
AB Mass spectra of I (R = CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CO<sub>2</sub>Et), II (R = CN, CSNH<sub>2</sub>), III (R = CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CO<sub>2</sub>Et; R<sub>1</sub> = H, Br, Me), IV (R = CN, CONH<sub>2</sub>, CSNH<sub>2</sub>, CO<sub>2</sub>Et, CO<sub>2</sub>Me), and V (X = O, S) were tabulated. The metal cleavage of the pyrone ring is largely dependent on the stability, under electron impact, of the attached functional group.

IT 1846-78-2

RL: PRP (Properties)  
 (mass spectrum of)

RN 1846-78-2 CAPLUS

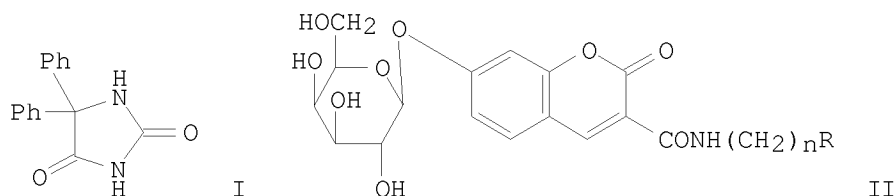
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
 (5 CITINGS)

L9 ANSWER 285 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1980:174695 CAPLUS  
 DOCUMENT NUMBER: 92:174695  
 ORIGINAL REFERENCE NO.: 92:28190h,28191a  
 TITLE: Reagents for use in binding samples in the detection  
 of diphenylhydantoin  
 INVENTOR(S): Buckler, Robert Thomas  
 PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
 SOURCE: Ger. Offen., 43 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2914842	A1	19791031	DE 1979-2914842	19790411 <--
DE 2914842	C2	19831117		
US 4182856	A	19800108	US 1978-899844	19780425 <--
PRIORITY APPLN. INFO.: GI			US 1978-899844	A 19780425



AB Reagents for detection of diphenylhydantoin (I) [57-41-0] and its salts in biol. fluids, by binding assays, are described. These reagents include labeled I conjugates II (R = PhO and diphenylhydantoinyl; n = 2-6) directly used, and immunogens for preparing I-specific antibodies. The labeled conjugates were prepared by the reaction of a mixed anhydride (from  $\beta$ -galactosylumbelliferone-3-carboxylate and an alkyl chloroformate) with either N1- or N3-( $\omega$ -aminoalkyl)diphenylhydantoin, or [o-( $\omega$ -aminoalkoxy)phenyl]phenylhydantoin. The immunogen conjugates were prepared by the reaction of N1- or N3-( $\omega$ -carboxyalkyl)diphenylhydantoin, or [o-( $\omega$ -carboxyalkoxy)phenyl]phenylhydantoin with a polyamino acid such as albumin under conditions favorable to the formation of amide linkage. The usefulness of these reagents was demonstrated.

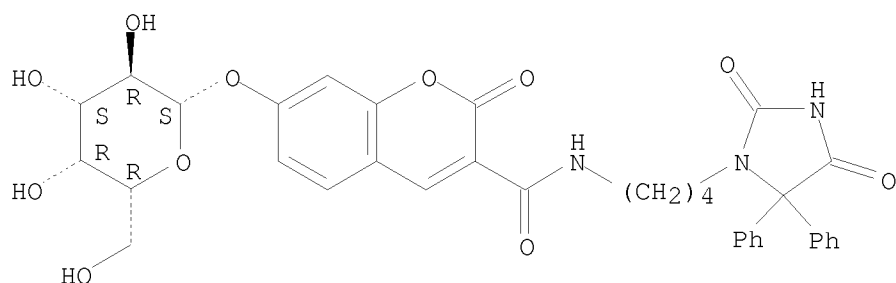
IT 73304-25-3P 73304-29-7P 73461-84-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, for diphenylhydantoin determination)

RN 73304-25-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2,4-dioxo-5,5-diphenyl-1-imidazolidinyl)butyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

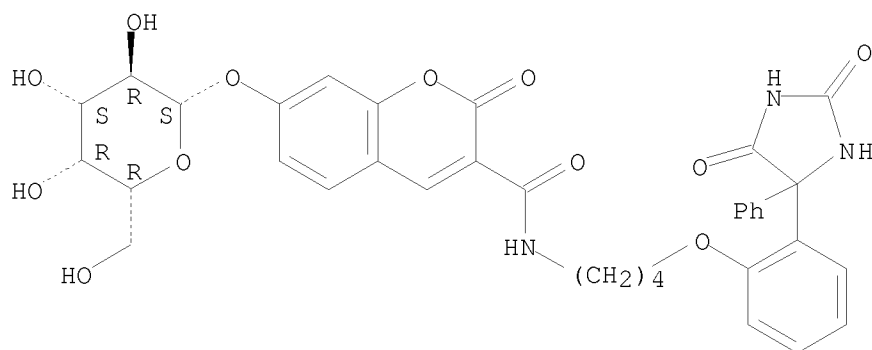
10/513699



RN 73304-29-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[2-(2,5-dioxo-4-phenyl-4-imidazolidinyl)phenoxy]butyl]-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

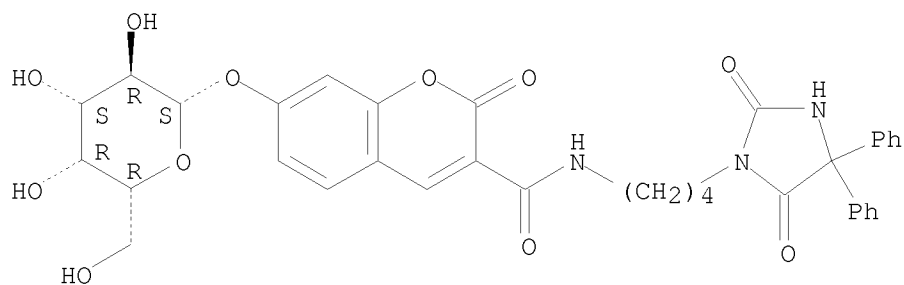
Absolute stereochemistry.



RN 73461-84-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2,5-dioxo-4,4-diphenyl-1-imidazolidinyl)butyl]-7-(β-D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.

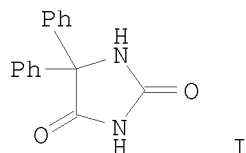




10/513699

L9 ANSWER 286 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1980:157931 CAPLUS  
DOCUMENT NUMBER: 92:157931  
ORIGINAL REFERENCE NO.: 92:25495a,25498a  
TITLE: Reagents for use in binding assays to determine  
diphenylhydantoin  
INVENTOR(S): Buckler, Robert T.  
PATENT ASSIGNEE(S): Miles Laboratories, Inc., USA  
SOURCE: U.S., 11 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 4182856	A	19800108	US 1978-899844	19780425 <--
US 4194048	A	19800318	US 1978-967131	19781207 <--
US 4213894	A	19800722	US 1978-967132	19781207 <--
US 4213964	A	19800722	US 1978-967136	19781207 <--
CA 1121810	A1	19820413	CA 1979-324409	19790329 <--
DE 2914842	A1	19791031	DE 1979-2914842	19790411 <--
DE 2914842	C2	19831117		
GB 2021564	A	19791205	GB 1979-13979	19790423 <--
GB 2021564	B	19820804		
GB 2038838	A	19800730	GB 1980-1180	19790423 <--
GB 2038838	B	19820811		
GB 2039485	A	19800813	GB 1979-1179	19790423 <--
GB 2039485	B	19821020		
GB 2039484	A	19800813	GB 1980-1178	19790423 <--
GB 2039484	B	19821020		
CA 1137987	A2	19821221	CA 1982-393745	19820107 <--
CA 1137988	A2	19821221	CA 1982-393746	19820107 <--
CA 1142511	A2	19830308	CA 1982-393747	19820107 <--
CA 1142512	A2	19830308	CA 1982-393748	19820107 <--
PRIORITY APPLN. INFO.:			US 1978-899844	A3 19780425
			CA 1979-324409	A3 19790329
OTHER SOURCE(S):	MARPAT	92:157931		
GI				



AB Reagents for detection of diphenylhydantoin (I) [57-41-0] and its salts in biol. fluids, by binding assays, are described. They include labeled I conjugates directly used, and immunogen for preparing I-specific antibodies. The labeled conjugates were prepared by the reaction of a mixed anhydride

(from  $\beta$ -galactosylumbelliferone-3-carboxylate and an alkyl chloroformate) with either N1- or N3-( $\omega$ -aminoalkyl)diphenylhydantoins, or [o-( $\omega$ -aminoalkoxy)phenyl]phenylhydantoins. The immunogen conjugates were prepared by the reaction of N1- or N3-( $\omega$ -carboxyalkyl)diphenylhydantoins, or [o-( $\omega$ -carboxyalkoxy)phenyl]phenylhydantoins with a polyaminoacid such as an albumin under conditions favorable to the formation of amide linkages. The usefulness of these reagents was demonstrated.

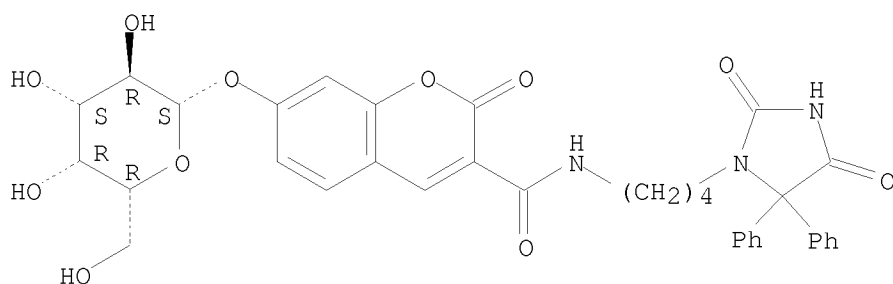
IT 73304-25-3P 73304-29-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for diphenylhydantoin determination)

RN 73304-25-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2,4-dioxo-5,5-diphenyl-1-imidazolidinyl)butyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

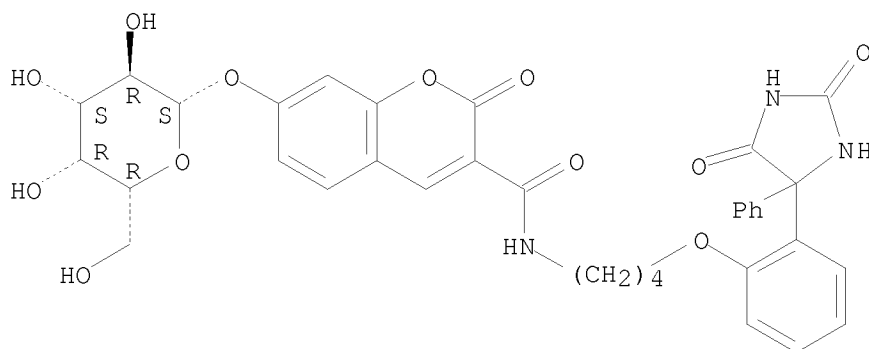
Absolute stereochemistry.



RN 73304-29-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-[2-(2,5-dioxo-4-phenyl-4-imidazolidinyl)phenoxy]butyl]-7-( $\beta$ -D-galactopyranosyloxy)-2-oxo- (CA INDEX NAME)

Absolute stereochemistry.



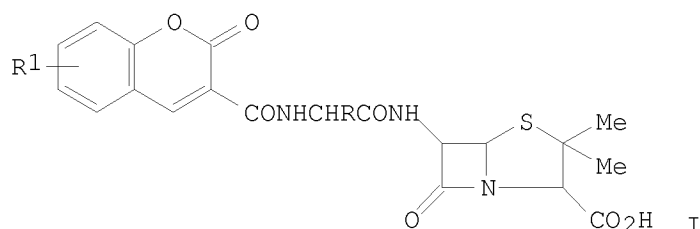
OS.CITING REF COUNT: 8

THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD  
(8 CITINGS)

L9 ANSWER 287 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1980:111003 CAPLUS  
 DOCUMENT NUMBER: 92:111003  
 ORIGINAL REFERENCE NO.: 92:18121a,18124a  
 TITLE: Coumarincarboxamidopenicillin derivatives  
 INVENTOR(S): Yasuda, Naohiko; Iwagami, Hisao; Takigawa, Etsuko;  
 Eguchi, Chikahiko; Okutsu, Masaru; Nakamiya, Teruaki  
 PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54122288	A	19790921	JP 1978-28458	19780313 <--
PRIORITY APPLN. INFO.:			JP 1978-28458	A 19780313

GI



AB Coumarincarboxamidopenicillins (I; R = H, organic radical; R1 = H, NO2, NH2, halo, OH, alkoxy) were prepared by condensation of coumarin-3-carboxylic acid (II) derivs. with penicillin derivs. Thus, 5 mmol II was treated with SOCl2 at 80° to give the acid chloride, which in MeCN was treated with 4.5 mmol d-(-)- $\alpha$ -aminobenzylpenicillin trihydrate and 2N NaOH in aqueous MeCN at pH 8.5 and 0.25° to give 77% d-I (R = Ph, R1 = H). Similarly prepared were 7 addnl. I, which showed bactericidal activity against Escherichia coli at 6.25-25  $\mu$ g/mL.

IT 72973-53-6P

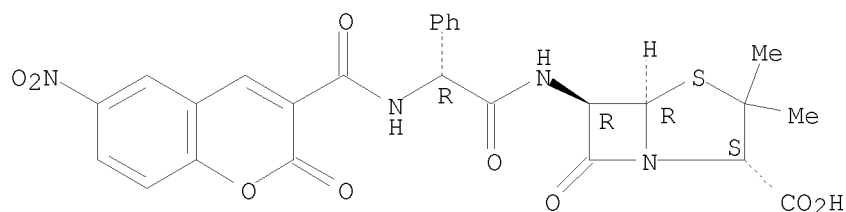
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reduction of)

RN 72973-53-6 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
 3,3-dimethyl-6-[[[(6-nitro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-7-oxo-, monosodium salt,  
 [2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

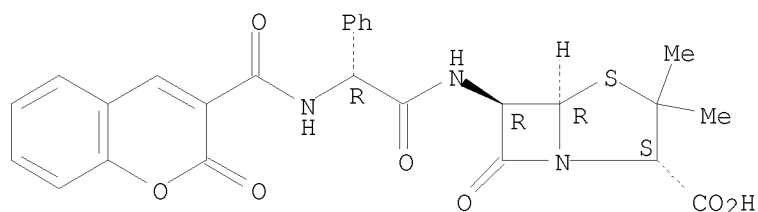
10/513699



● Na

IT 67608-93-9P 67609-13-6P 72973-54-7P  
72973-57-0P 72973-58-1P 72973-59-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 67608-93-9 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

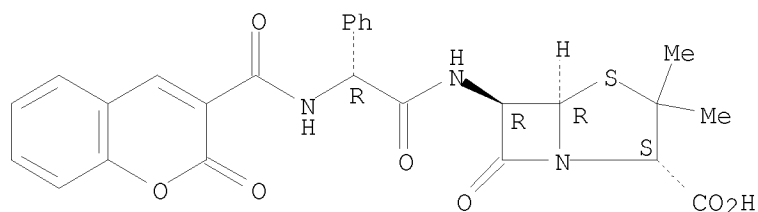
Absolute stereochemistry.



RN 67609-13-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-, monosodium salt,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

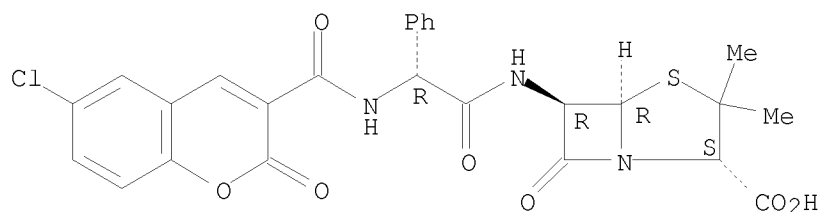
10/513699



● Na

RN 72973-54-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium  
salt, [2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

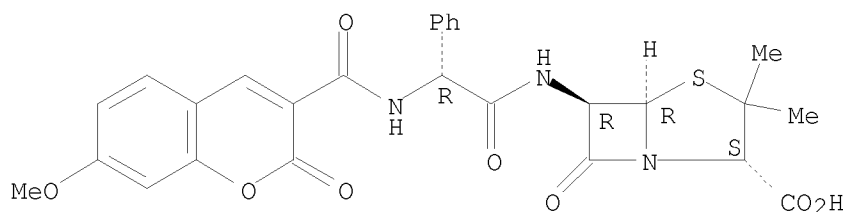


● Na

RN 72973-57-0 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium  
salt, [2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

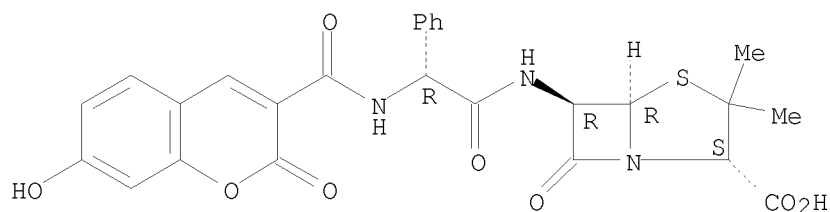
10/513699



● Na

RN 72973-58-1 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium  
salt, [2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

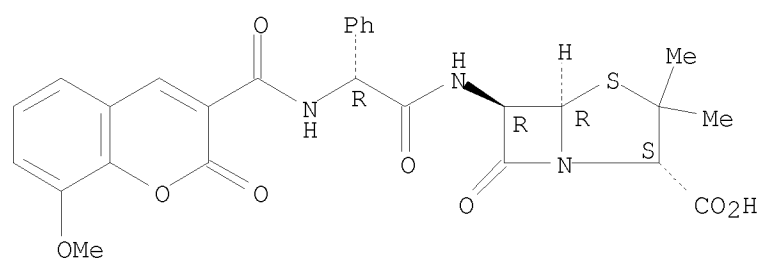


● Na

RN 72973-59-2 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium  
salt, [2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/513699



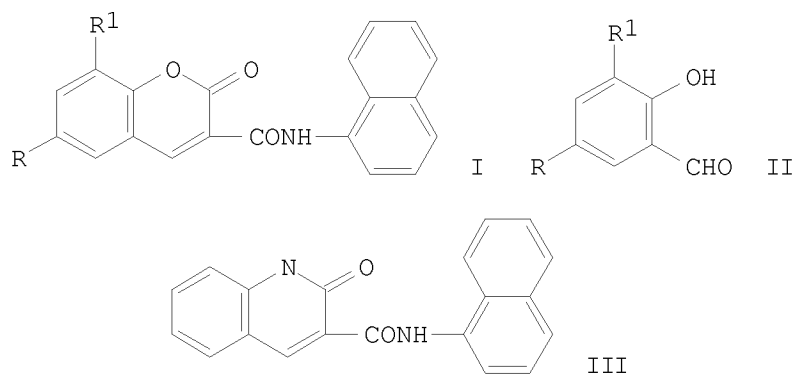
● Na

<12/04/2007>

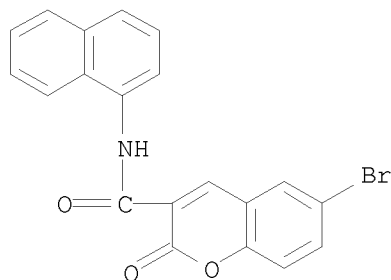
Erich Leese

10/513699

L9 ANSWER 288 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1980:110777 CAPLUS  
DOCUMENT NUMBER: 92:110777  
ORIGINAL REFERENCE NO.: 92:18073a,18076a  
TITLE: A note on the synthesis of some new coumarins,  
benzocoumarin, carbostyryl and quinolone from  
N- $\alpha$ -naphthyl malonamic acid and some of its  
derivatives  
AUTHOR(S): Seth, D. S.; Banerji, B. C.; Ittyerah, P. I.  
CORPORATE SOURCE: Chem. Lab., St. John's Coll., Agra, India  
SOURCE: Current Science (1979), 48(19), 859-60  
CODEN: CUSCAM; ISSN: 0011-3891  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The amides I (R = H, Cl, Br, R1 = H; R = R1 = Cl, Br, iodo) were obtained in 20.9-48.5% yield by condensing salicylaldehydes II with N-1-naphthylmalonamic acid. III was similarly obtained from 2-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO and Et N-1-naphthylmalonamate.  
IT 38486-05-4P 38486-06-5P 72788-19-3P  
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
RN 38486-05-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-1-naphthalenyl-2-oxo- (CA INDEX NAME)

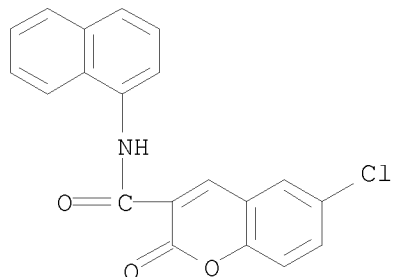




10/513699

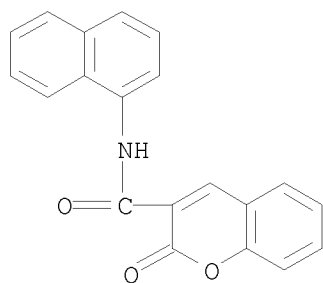
RN 38486-06-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-1-naphthalenyl-2-oxo- (CA INDEX NAME)



RN 72788-19-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-1-naphthalenyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT:

4

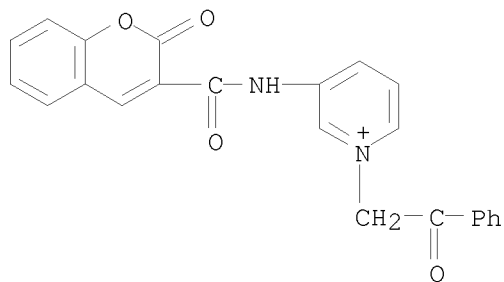
THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

10/513699

L9 ANSWER 289 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1980:58540 CAPLUS  
DOCUMENT NUMBER: 92:58540  
ORIGINAL REFERENCE NO.: 92:9691a,9694a  
TITLE: Syntheses in the class of benzopyrans  
AUTHOR(S): Dragota, Ilie; Caprosu, Maria; Druta, I.; Petrovanu, Magda  
CORPORATE SOURCE: Inst. Polytech. Jassy, Iasi, Rom.  
SOURCE: Buletinul Institutului Politehnic din Iasi, Sectia 2:  
Chimie (1978), 24(3-4), 103-7  
CODEN: BICMCF; ISSN: 0373-3246  
DOCUMENT TYPE: Journal  
LANGUAGE: French  
OTHER SOURCE(S): CASREACT 92:58540  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Phenacylpyridinium bromide I was treated with Et<sub>3</sub>N in refluxing C<sub>6</sub>H<sub>6</sub> to give the unstable pyridinium ylide II which reacted in situ with MeO<sub>2</sub>CC.tplbond.CC(=O)Me to give the stable (dicarbomethoxyallyl)pyridinium ylide III. II underwent in situ cycloaddn. reaction with N-phenylmaleimide to give the pyrrolopyridine imide IV.  
IT 72543-08-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and dehydrobromination of)  
RN 72543-08-9 CAPLUS  
CN Pyridinium, 3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-1-(2-oxo-2-phenylethyl)-, bromide (1:1) (CA INDEX NAME)

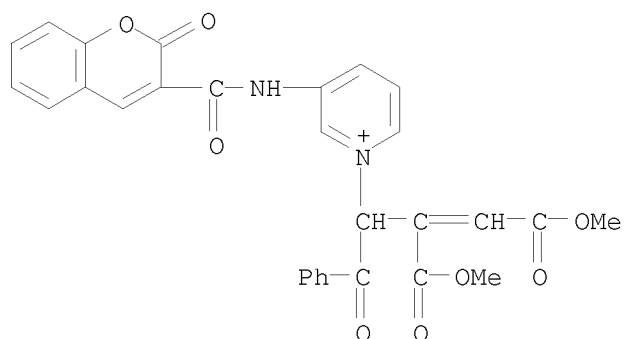


● Br<sup>-</sup>

IT 72543-10-3P 72543-11-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 72543-10-3 CAPLUS  
CN Pyridinium, 1-[1-benzoyl-4-methoxy-2-(methoxycarbonyl)-4-oxo-2-buten-1-yl]-3-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, chloride (1:1) (CA

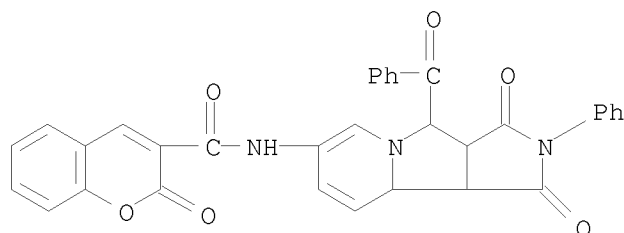
10/513699

INDEX NAME)



RN 72543-11-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-benzoyl-2,3,3a,4,9a,9b-hexahydro-1,3-dioxo-2-phenyl-1H-pyrrolo[3,4-a]indolizin-7-yl)-2-oxo- (CA INDEX NAME)



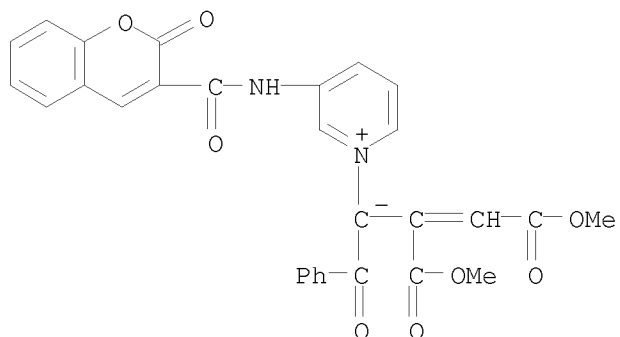
IT 72543-09-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, by addition of acetylenedicarboxylate with  
phenacylpyridinium  
ylide)

RN 72543-09-0 CAPLUS

CN Pyridinium, 1-[1-benzoyl-4-methoxy-2-(methoxycarbonyl)-4-oxo-2-buten-1-yl]-3-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, inner salt (CA INDEX NAME)

10/513699

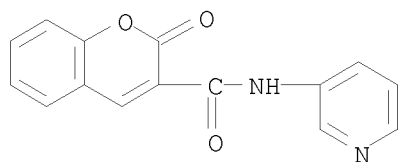


IT 72543-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with bromoacetophenone)

RN 72543-07-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-3-pyridinyl- (CA INDEX NAME)



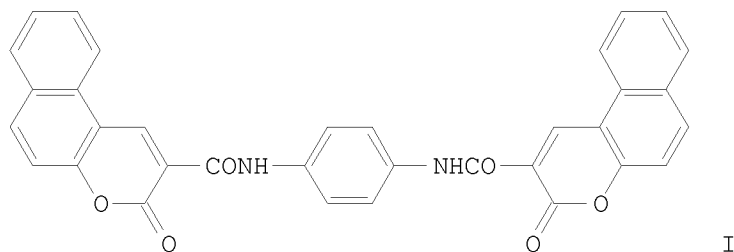
OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 290 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1979:612575 CAPLUS  
 DOCUMENT NUMBER: 91:212575  
 ORIGINAL REFERENCE NO.: 91:34265a,34268a  
 TITLE: Coumarin and benzocoumarin derivatives  
 INVENTOR(S): Bingham, Richard Charles  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA  
 SOURCE: Ger. Offen., 45 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2905447	A1	19790816	DE 1979-2905447	19790213 <--
US 4177195	A	19791204	US 1978-898443	19780420 <--
BE 874090	A1	19790813	BE 1979-193396	19790212 <--
FR 2416925	A1	19790907	FR 1979-3475	19790212 <--
FR 2416925	B1	19860321		
JP 54117534	A	19790912	JP 1979-14418	19790213 <--
JP 62012823	B	19870320		
CH 642074	A5	19840330	CH 1979-1377	19790213 <--
PRIORITY APPLN. INFO.:			US 1978-877462	A 19780213
			US 1978-898443	A 19780420

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
 GI



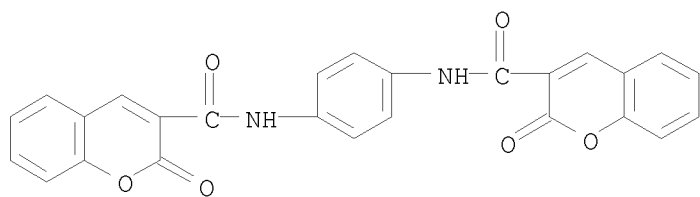
AB The title yellow to orange pigments, (RCONH)2Z, where R = an optionally substituted coumarin or benzocoumarin residue and Z = optionally substituted p-phenylene or 4-C6H4C6H4-4 are prepared and are used in acrylic lacquers showing better stability than com. yellow pigments. Thus, a mixture of 5,6-benzocoumarin-3-carbonyl chloride [71942-38-6] and p-phenylenediamine [106-50-3] in o-C6H4Cl2 was heated to give yellow, crystalline I [71942-50-2].

IT 71942-46-6P 71942-47-7P 71942-49-9P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)

RN 71942-46-6 CAPLUS

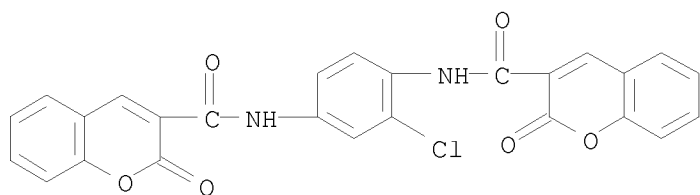
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[2-oxo- (CA INDEX NAME)

10/513699



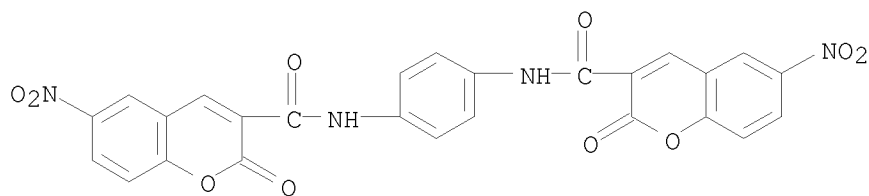
RN 71942-47-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-(2-chloro-1,4-phenylene)bis[2-oxo-  
(9CI) (CA INDEX NAME)



RN 71942-49-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,4-phenylenebis[6-nitro-2-oxo- (CA  
INDEX NAME)

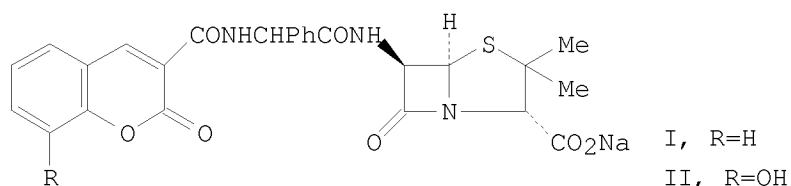


OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 291 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1979:534716 CAPLUS  
DOCUMENT NUMBER: 91:134716  
ORIGINAL REFERENCE NO.: 91:21661a,21664a  
TITLE: In vitro microbiological evaluation of TEI-1194 and  
TEI-2012, novel antipseudomonal semisynthetic  
penicillins  
AUTHOR(S): Suzuki, Yoji; Ohmori, Hitoshi; Azuma, Akiko;  
Hashimoto, Yoshinobu; Ichikawa, Yataro; Noguchi,  
Teruhisa  
CORPORATE SOURCE: Teijin Inst. Biomed. Res., Tokyo, Japan  
SOURCE: Journal of Antibiotics (1979), 32(7), 711-17  
CODEN: JANTAJ; ISSN: 0021-8820  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



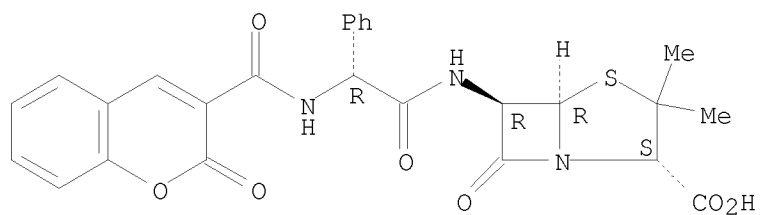
AB TEI 1194 (I) [67609-13-6] and TEI 2012 (II) [71344-34-8], possessed broad spectra of in vitro antibacterial activities, were studied. Minimal inhibitory concns. of both agents were compared with those of carbenicillin [4697-36-3]. At a concentration at 6.25  $\mu\text{g/mL}$ , 85-90% of a total of 50 strains of clin. isolated *Pseudomonas aeruginosa* were inhibited, whereas carbenicillin had no effect. Evaluation of the antibacterial activities against a series of mutants producing different levels of  $\beta$ -lactamases, as well as tests of the drug sensitivities to some  $\beta$ -lactamases, demonstrated that I and II had low susceptibility to various cephalosporinases. However, both compds. were susceptible to penicillinase [9001-74-5] from *Klebsiella pneumoniae* H-2, being metabolized at a rate 15% that of penicillin G.

IT 67609-13-6 71344-34-8  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(bactericidal activity of)

RN 67609-13-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, monosodium salt,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

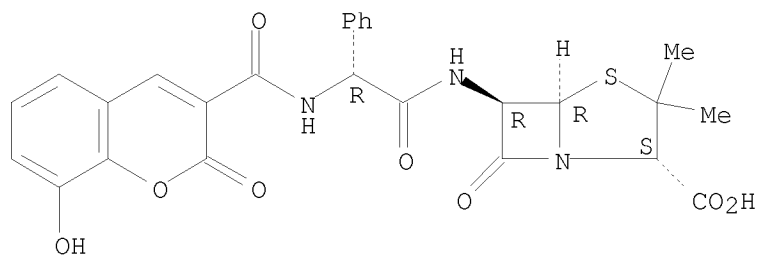
10/513699



● Na

RN 71344-34-8 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(2R)-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-, monosodium  
salt, (2S,5R,6R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

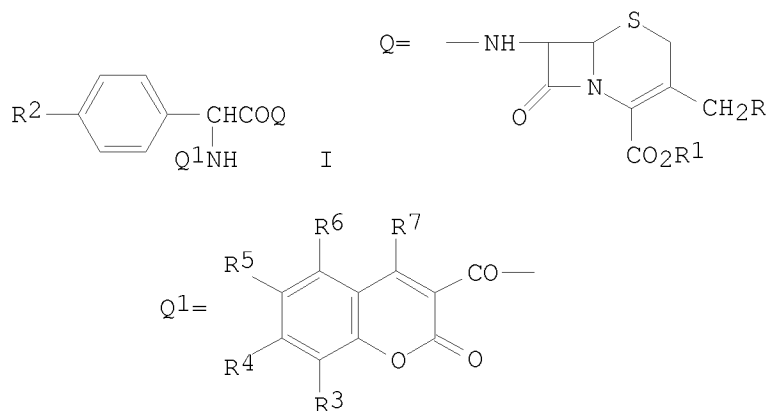


● Na



L9 ANSWER 292 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1979:38943 CAPLUS  
 DOCUMENT NUMBER: 90:38943  
 ORIGINAL REFERENCE NO.: 90:6279a,6282a  
 TITLE: Cephalosporin derivatives  
 INVENTOR(S): Ono, Shoji; Sugiyama, Takashi; Kawakami, Yoshiko;  
 Ishikawa, Yataro; Oomori, Hitoshi; Higashi, Akiko;  
 Susuki, Yoji  
 PATENT ASSIGNEE(S): Teijin Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53087389	A	19780801	JP 1977-1868	19770113 <--
PRIORITY APPLN. INFO.: GI			JP 1977-1868	A 19770113



AB Cephalosporins I (R = H, OAc; R<sup>1</sup> = H, R<sup>2</sup> = H, OH; R<sup>3</sup>-R<sup>7</sup> = H, group containing N, S, or O) and their salts were prepared by treating 4-R<sup>2</sup>C<sub>6</sub>H<sub>4</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>Q (II; R, R<sup>2</sup> as above; R<sup>1</sup> = H, protective group) with Q<sup>1</sup>OH or by treating QH (R as above; R<sup>1</sup> = H, protective group) with 4-R<sup>2</sup>C<sub>6</sub>H<sub>4</sub>CH(NH-Q<sup>1</sup>)CO<sub>2</sub>H. Thus, 1 g II (R = AcO, R<sup>1</sup> = R<sup>2</sup> = H) in H<sub>2</sub>O-Me<sub>2</sub>CO at pH 8 was stirred with Q<sup>1</sup>Cl (R<sup>3</sup>-R<sup>7</sup> = H) (prepared from 0.38 g Q<sup>1</sup>OH and SOCl<sub>2</sub>) in Me<sub>2</sub>CO with ice-cooling at pH 7-9 to give 0.512 g corresponding D-I (D at the α-C of the benzyl group). Also prepared were D-I (R<sup>1</sup> = R<sup>2</sup> = R<sup>4</sup> = R<sup>6</sup> = R<sup>7</sup> = H) (R, R<sup>3</sup>, R<sup>5</sup> given): H, H, H; AcO, MeO, H; AcO, EtO, H; AcO, H, Cl; AcO, H, Br; AcO, AcO, H. Bactericidal activity of I against 8 bacteria were: min. inhibitory concentration <0.4-100 μ/mL.

IT 68881-93-6P 68881-94-7P 68881-95-8P  
 68881-96-9P 68881-97-0P 68881-98-1P  
 68881-99-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological

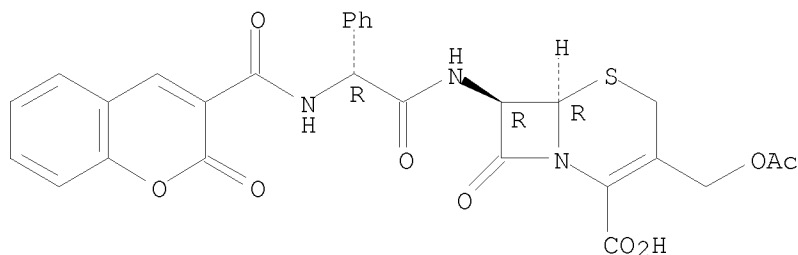
10/513699

study); PREP (Preparation)  
(preparation and bactericidal activity of)

RN 68881-93-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-8-oxo-7-[[[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]- (9CI)  
(CA INDEX NAME)

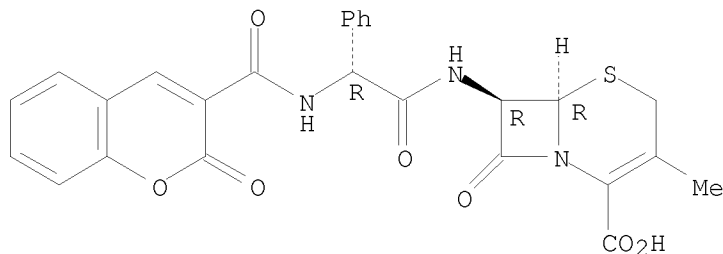
Absolute stereochemistry.



RN 68881-94-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-methyl-8-oxo-7-[[[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

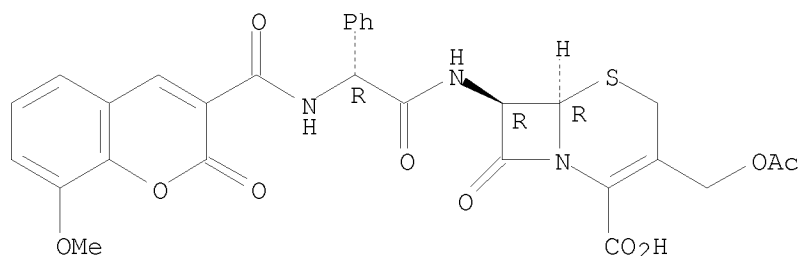


RN 68881-95-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]-  
(9CI) (CA INDEX NAME)

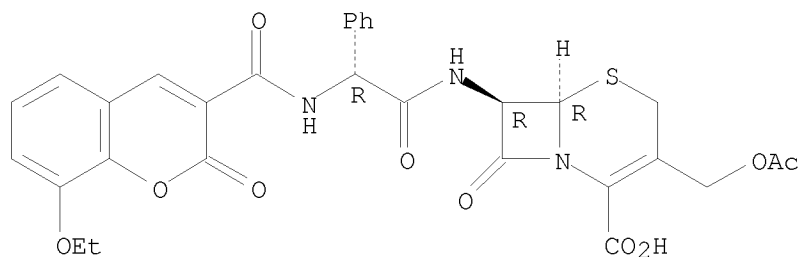
Absolute stereochemistry.

10/513699



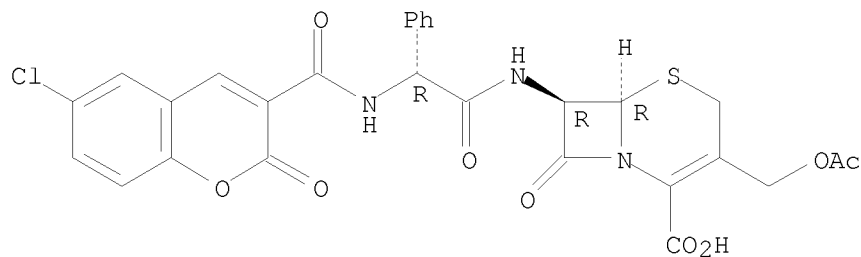
RN 68881-96-9 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(8-ethoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 68881-97-0 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]-(9CI) (CA INDEX NAME)

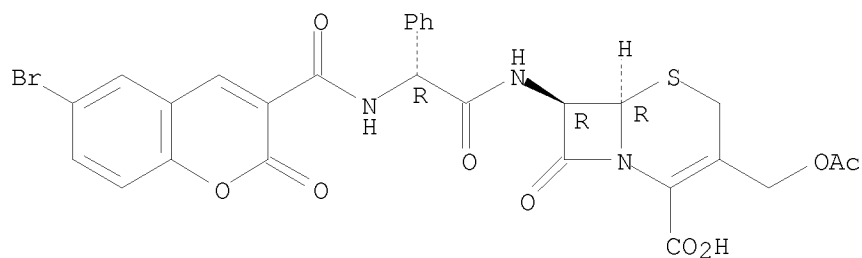
Absolute stereochemistry.



RN 68881-98-1 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]-(9CI) (CA INDEX NAME)

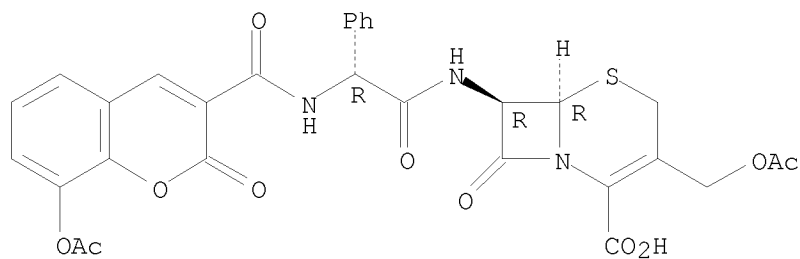
Absolute stereochemistry.

10/513699



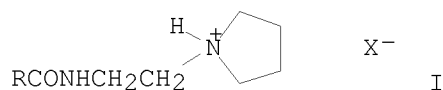
RN 68881-99-2 CAPLUS  
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
3-[(acetyloxy)methyl]-7-[[[8-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]phenylacetyl]amino]-8-oxo-, [6R-[6 $\alpha$ , 7 $\beta$ (R\*)]]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 293 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1979:38781 CAPLUS  
 DOCUMENT NUMBER: 90:38781  
 ORIGINAL REFERENCE NO.: 90:6243a,6246a  
 TITLE: Pyrrolidinoethyl amides useful in pulmonary  
 therapeutics  
 INVENTOR(S): Casadio, Sylvano; Cousse, Henri; Bonnaud, Bernard;  
 Tarayre, Jean Pierre  
 PATENT ASSIGNEE(S): Pierre Fabre S. A., Fr.  
 SOURCE: Fr. Demande, 18 pp. Addn. to Fr. Demande 2,303,542.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2361883	A2	19780317	FR 1976-10754	19760409 <--
FR 2361883	B2	19800530		
CH 611612	A5	19790615	CH 1976-8038	19760623 <--
DE 2632200	A1	19771020	DE 1976-2632200	19760716 <--
BE 844664	A1	19761116	BE 1976-169363	19760729 <--
GB 1554912	A	19791031	GB 1976-31921	19760730 <--
US 4122199	A	19781024	US 1976-714764	19760816 <--
US 4192883	A	19800311	US 1978-931489	19780807 <--
PRIORITY APPLN. INFO.:			FR 1976-10754	A 19760409
			US 1976-714764	A3 19760816
OTHER SOURCE(S):	MARPAT 90:38781			
GI				



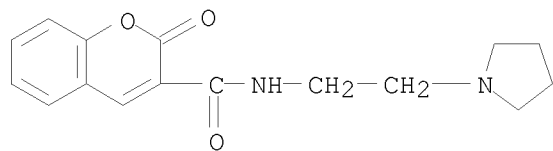
AB Amides I [R = PhCH<sub>2</sub>, Ph<sub>2</sub>CH, Ph<sub>2</sub>C(OR<sub>1</sub>) (R<sub>1</sub> = H, alkyl), 10-phenothiazinyl; X = fatty acid anion, pamoate] and I [R = 2-HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>, PhOCH<sub>2</sub>, R<sub>2</sub>C<sub>6</sub>H<sub>4</sub>OCMe<sub>2</sub> (R<sub>2</sub> = H, halo), coumarin-3-yl, xanthen-9-yl, PhCH:CH, fluoren-9-yl; X = mineral or organic acid anion] were prepared and exhibited antitussive activity. Et fluorene-9-carboxylate was heated with 1-(2-aminoethyl)pyrrolidine and HCl was added to give I (R = fluoren-9-yl, X = Cl).

IT 68654-59-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and antitussive activity of)

RN 68654-59-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[2-(1-pyrrolidinyl)ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

10/513699



● HCl

OS.CITING REF COUNT:        3        THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 294 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1978:563568 CAPLUS  
 DOCUMENT NUMBER: 89:163568  
 ORIGINAL REFERENCE NO.: 89:25353a,25356a  
 TITLE: Penicillins  
 INVENTOR(S): Ono, Shoji; Sugiyama, Takashi; Kawakami, Yoshiko;  
 Ichikawa, Yataro; Suzuki, Yoji; Oomori, Hitoshi;  
 Higashi, Akiko  
 PATENT ASSIGNEE(S): Teijin Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 53040793	A	19780413	JP 1976-115371	19760928 <--
JP 61039951	B	19860906		
GB 1582217	A	19810107	GB 1978-7771	19780227 <--
PRIORITY APPLN. INFO.:			JP 1976-115371	A 19760928
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Twenty-six penicillins I (R = H, OH; R1 = H, Me; R2 = H, OMe; R3 = H, Cl, Br, OMe, etc.; R4 = H, OH, OMe, OAc; R5 = H, Br, OMe, OEt, etc.) and I Na salts, having antibacterial activity to both Gram-pos. and -neg. bacteria, were prepared by reaction of II (R6 = H, Na) with III (R7 = Cl, CO2Et), or 6-aminopenicillanic acid with IV. Thus, refluxing 0.19 g III (R1-R5 = H, R7 = OH) and (COCl)<sub>2</sub> gave the chloride (V). Stirring V and 0.371 g II (R = H, R6 = Na) in H<sub>2</sub>O-Me<sub>2</sub>CO at pH 7-9 30 min with ice cooling gave 0.320 g D(-)-I (R-R5 = H). The min. inhibitory concentration of I against *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Bacillus subtilis*, *Salmonella typhimurium*, etc., were <0.4-200  $\gamma$ /mL, i.e., .apprx.1/2 of those of ampicillin.

IT 67608-93-9P 67608-94-0P 67608-95-1P  
 67608-97-3P 67608-98-4P 67609-00-1P  
 67609-03-4P 67609-04-5P 67609-05-6P  
 67609-06-7P 67609-07-8P 67609-08-9P  
 67609-10-3P 67609-11-4P 67609-13-6P  
 67609-14-7P 67609-18-1P 67609-19-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

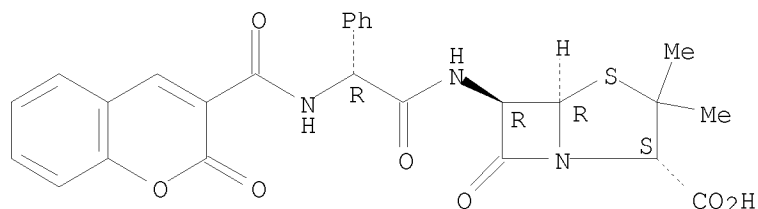
(preparation and bactericidal activity of)

RN 67608-93-9 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
 3,3-dimethyl-7-oxo-6-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-,  
 [2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

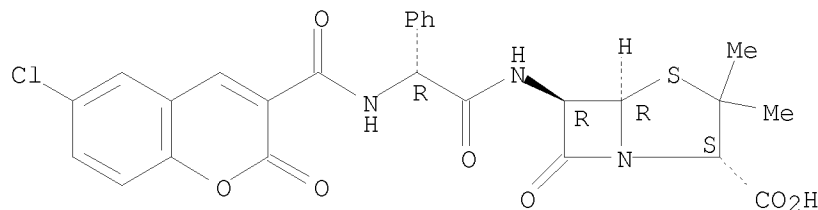
10/513699



RN 67608-94-0 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-chloro-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

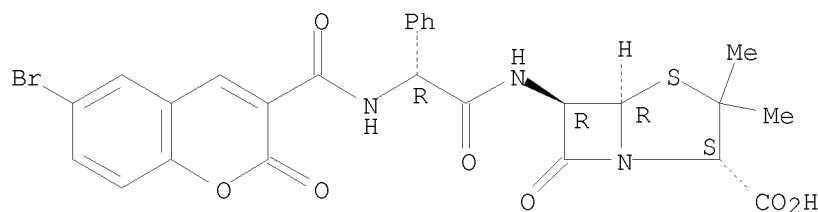
Absolute stereochemistry.



RN 67608-95-1 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(6-bromo-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



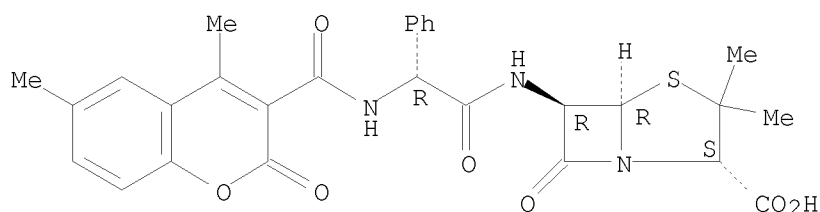
RN 67608-97-3 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(4,6-dimethyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



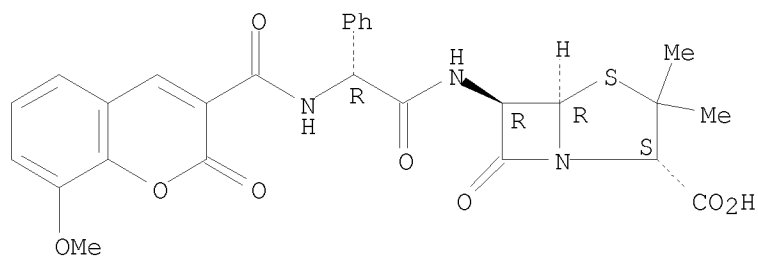
10/513699



RN 67608-98-4 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

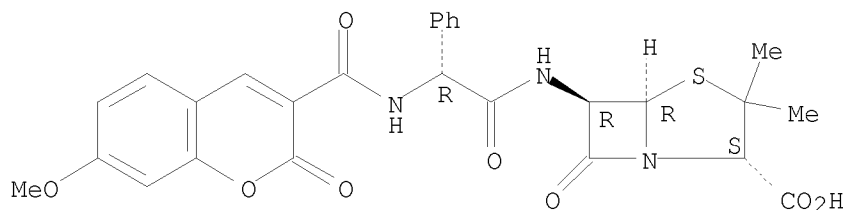
Absolute stereochemistry.



RN 67609-00-1 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

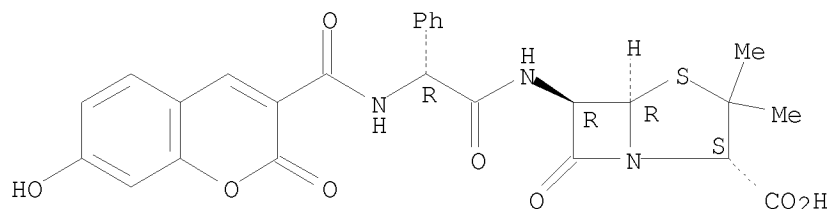


RN 67609-03-4 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(7-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

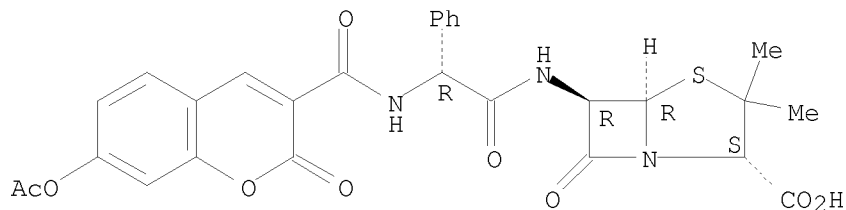
Absolute stereochemistry.

10/513699



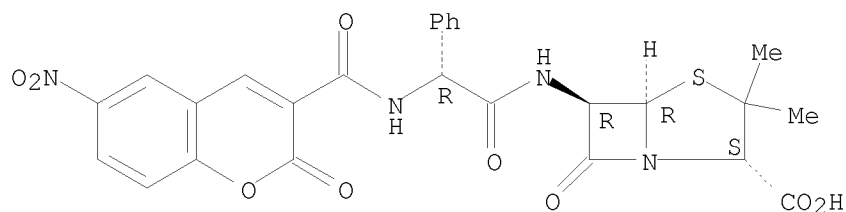
RN 67609-04-5 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[7-(acetyloxy)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-05-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[[[[6-nitro-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

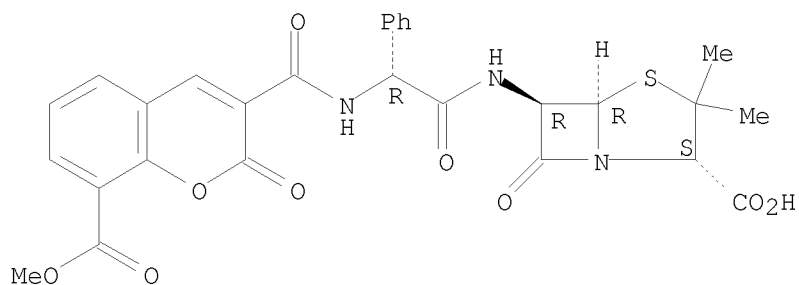
Absolute stereochemistry.



RN 67609-06-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[[8-(methoxycarbonyl)-2-oxo-2H-1-benzopyran-3-  
yl]carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

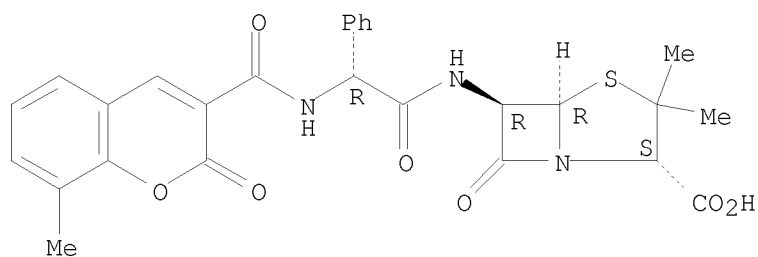
10/513699



RN 67609-07-8 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-6-[[[(8-methyl-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

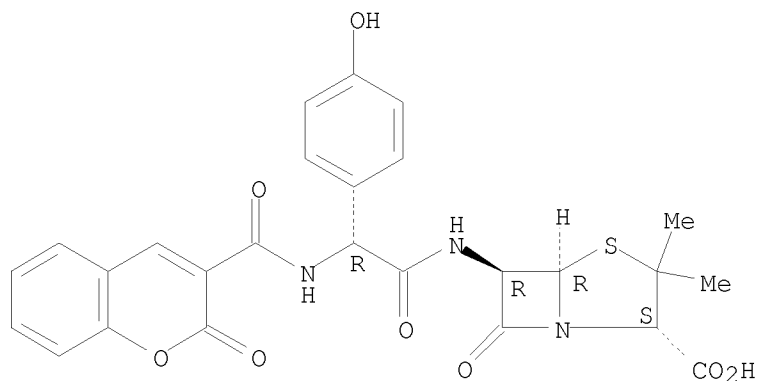
Absolute stereochemistry.



RN 67609-08-9 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(4-hydroxyphenyl)[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-10-3 CAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,

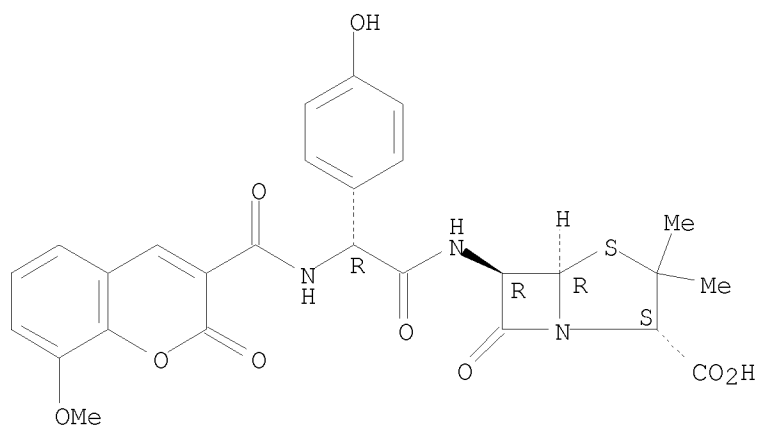
<12/04/2007>

Erich Leese

10/513699

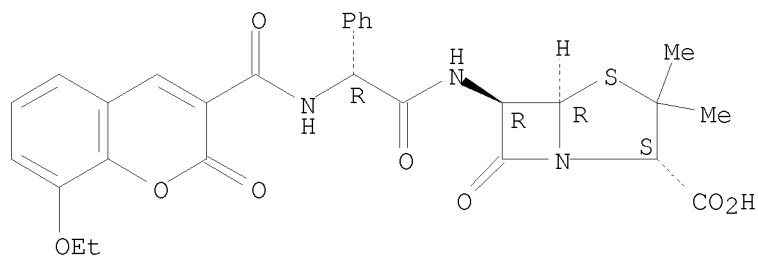
6-[[[(4-hydroxyphenyl)[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 67609-11-4 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[(8-ethoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

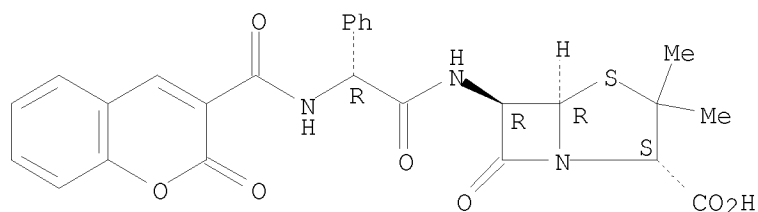
Absolute stereochemistry.



RN 67609-13-6 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
3,3-dimethyl-7-oxo-6-[[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-, monosodium salt,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

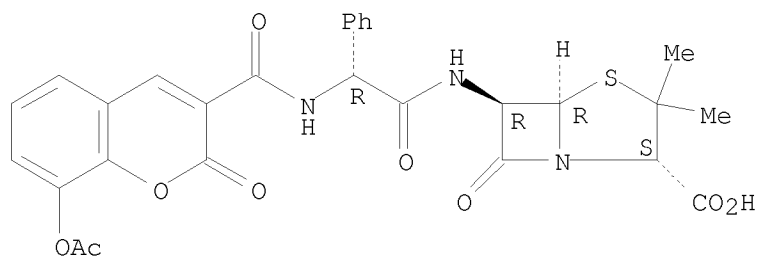
10/513699



● Na

RN 67609-14-7 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[(8-(acetyloxy)-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

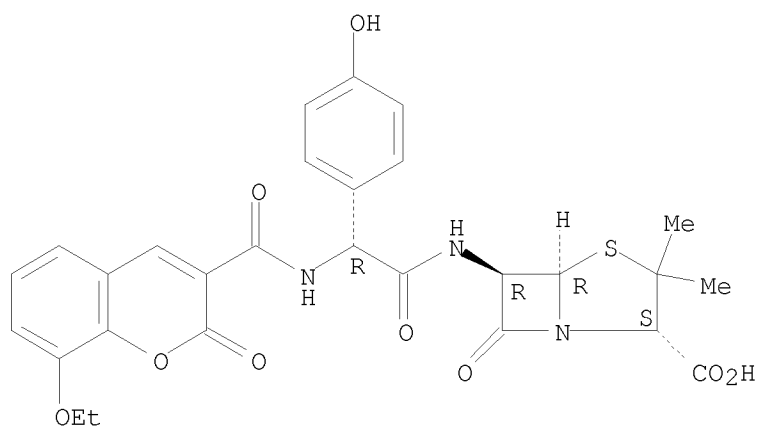
Absolute stereochemistry.



RN 67609-18-1 CAPLUS  
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[[(8-ethoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino](4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

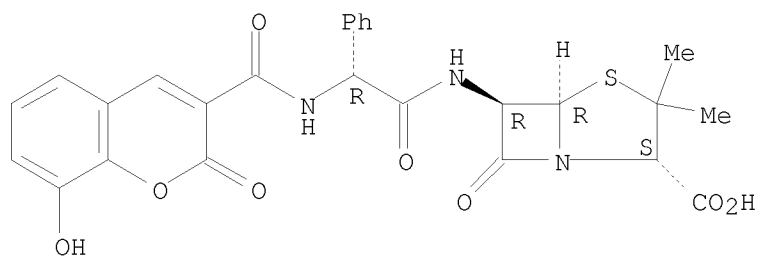
10/513699



RN 67609-19-2 CAPLUS

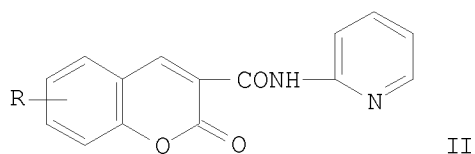
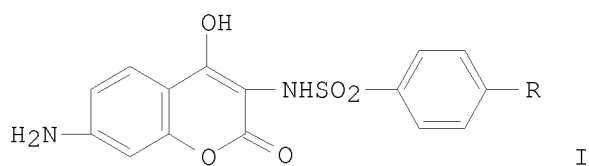
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,  
6-[[[(8-hydroxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]phenylacetyl]amino]-3,3-dimethyl-7-oxo-,  
[2S-[2 $\alpha$ , 5 $\alpha$ , 6 $\beta$ (S\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



10/513699

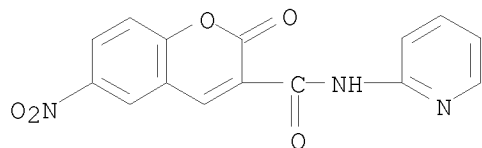
L9 ANSWER 295 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1978:22541 CAPLUS  
DOCUMENT NUMBER: 88:22541  
ORIGINAL REFERENCE NO.: 88:3613a,3616a  
TITLE: Studies on synthesis of coumarin derivatives. XXVI.  
Tuberculostatic activities and solubilities of  
3-sulfonamido- and 3-carboxamido-coumarins  
AUTHOR(S): Ichibagase, Hisashi; Ichikawa, Masataka; Kojima,  
Shoji; Onishi, Mizuo  
CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, Japan  
SOURCE: Kumamoto Medical Journal (1977), 30(1),  
16-23  
CODEN: KUMJAX; ISSN: 0023-5326  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB Coumarins I (R = H, NH<sub>2</sub>, Me, OMe) and II [R = 6-NH<sub>2</sub>, 6-NHCH<sub>2</sub>SO<sub>3</sub>Na, 6-(5-nitrofurfurylideneamino), 6-NHAc, 7-NH<sub>2</sub>] were prepared by sulfonylation of the amines or amination of the carboxylic acids. I and II had min. inhibitory concns. against Mycobacterium tuberculosis H37 Rv 6.3-100 µg/mL.

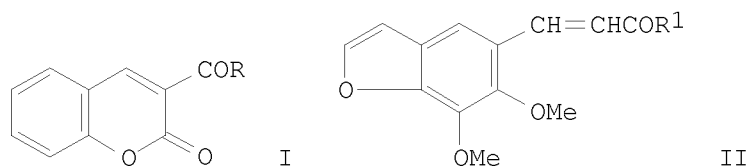
IT 21074-69-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reduction of)

RN 21074-69-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-2-pyridinyl- (CA INDEX NAME)



10/513699

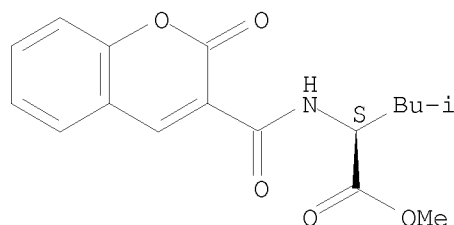
L9 ANSWER 296 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1977:155916 CAPLUS  
DOCUMENT NUMBER: 86:155916  
ORIGINAL REFERENCE NO.: 86:24499a,24502a  
TITLE: Synthesis of some coumarin-amino acid methyl ester derivatives  
AUTHOR(S): El-Naggar, A. M.; El-Gamal, M. H. A.; El-Tawil, B. A. H.; Ahmed, F. S. M.  
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt  
SOURCE: Acta Chimica Academiae Scientiarum Hungaricae ( 1976), 89(3), 279-84  
CODEN: ACASA2; ISSN: 0001-5407  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB Coumarin amino acid Me esters I [R = X-OMe (X = Gly, Ala, Leu, Ser, D-Val, Val, Glu, Tyr, D-Phe, Pro, Trp, Thr,  $\beta$ -Ala)] were prepared in 30-85% yields by acylating the appropriate H-X-OMe·HCl with I (R = Cl). Benzofurylpropenyl amino acid Me esters II [R<sub>1</sub> = Y-OMe (Y = Gly, Ala, D-Phe, Tyr, Thr, Trp)] were prepared in 30-82% yields by acylating the appropriate H-Y-OMe·HCl with II (R<sub>1</sub> = Cl) (III). II (R<sub>1</sub> = OH) was treated with PCl<sub>5</sub> to give III.

IT 56159-52-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, with hydrazine)  
RN 56159-52-5 CAPLUS  
CN L-Leucine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.



IT 56159-50-3P 56159-51-4P 56159-53-6P  
56159-54-7P 56159-55-8P 56159-56-9P

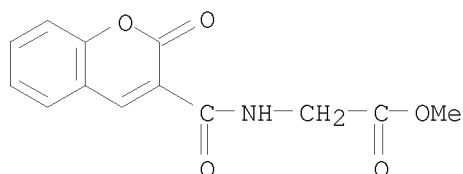


10/513699

56159-57-0P      56159-58-1P      56159-59-2P  
56159-60-5P      56159-61-6P      62437-81-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56159-50-3 CAPLUS

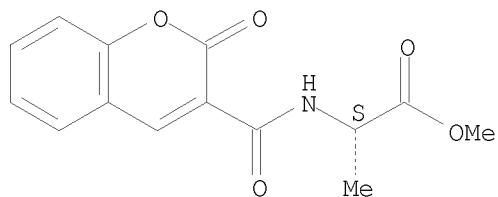
CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)



RN 56159-51-4 CAPLUS

CN L-Alanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

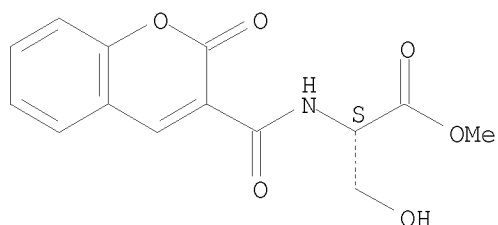
Absolute stereochemistry.



RN 56159-53-6 CAPLUS

CN L-Serine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.

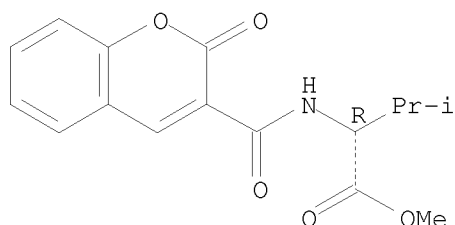


RN 56159-54-7 CAPLUS

CN D-Valine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

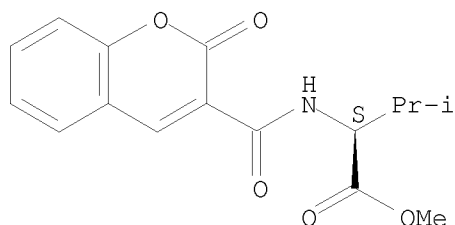
Absolute stereochemistry.

10/513699



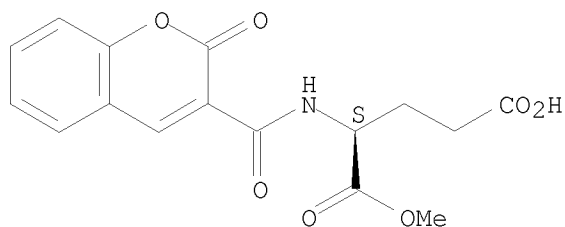
RN 56159-55-8 CAPLUS  
CN L-Valine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.



RN 56159-56-9 CAPLUS  
CN L-Glutamic acid, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, 1-methyl ester  
(CA INDEX NAME)

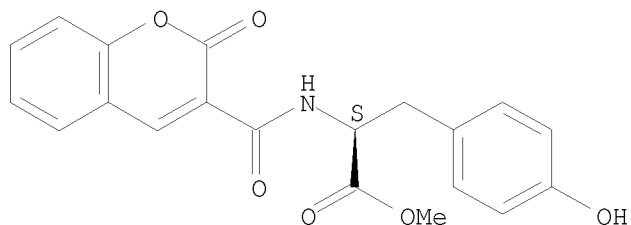
Absolute stereochemistry.



RN 56159-57-0 CAPLUS  
CN L-Tyrosine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

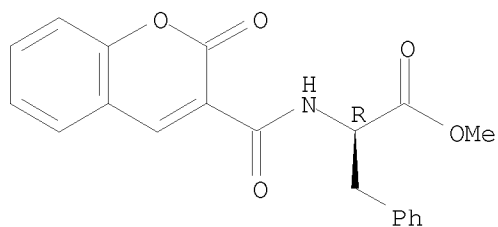
Absolute stereochemistry.

10/513699



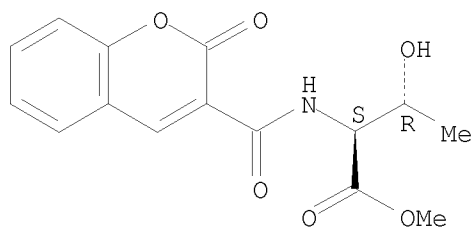
RN 56159-58-1 CAPLUS  
CN D-Phenylalanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)

Absolute stereochemistry.

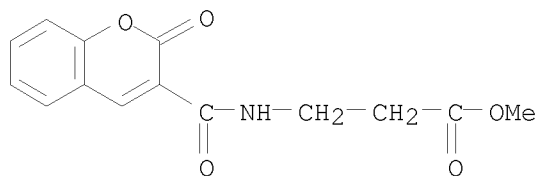


RN 56159-59-2 CAPLUS  
CN L-Threonine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.



RN 56159-60-5 CAPLUS  
CN beta-Alanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)



RN 56159-61-6 CAPLUS

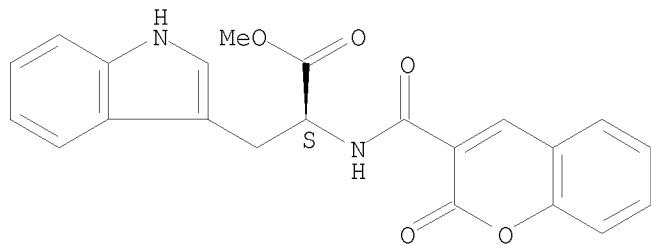
<12/04/2007>

Erich Leese

10/513699

CN L-Tryptophan, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

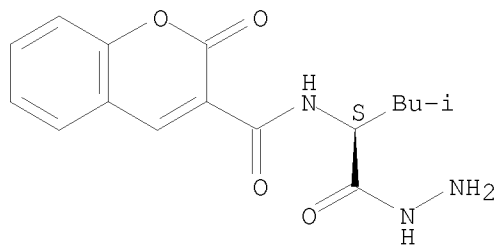
Absolute stereochemistry.



RN 62437-81-4 CAPLUS

CN L-Leucine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, hydrazide (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 2

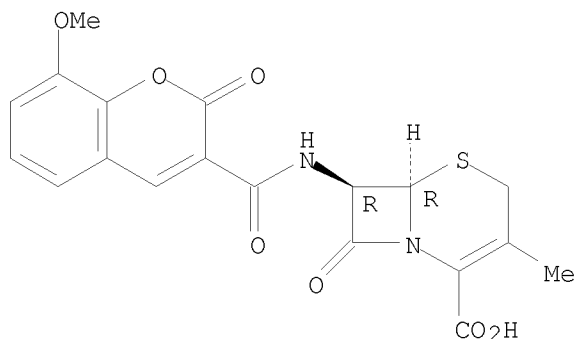
THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 297 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1977:106613 CAPLUS  
 DOCUMENT NUMBER: 86:106613  
 ORIGINAL REFERENCE NO.: 86:16821a,16824a  
 TITLE: Cephalosporins  
 INVENTOR(S): Nakagawa, Kazuyuki; Miyamoto, Seiji  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 51098294	A	19760830	JP 1975-22173	19750221 <--
PRIORITY APPLN. INFO.:			JP 1975-22173	A 19750221

GI For diagram(s), see printed CA Issue.  
 AB Cephalosporins I (Q = (substituted) O- or N-containing 6-membered heterocycle; R = H, halo, alkyl, alkoxy; n = 0, 1, 2; R1 = H, lower alkyl; R2 = H, OAc) [e.g. IV] were prepared by acylating II with acids III, activated with alkyl haloformates. I are antibacterial agents (no data). Thus,  $\alpha$ -(isocarboxystyryl-5-oxy)propionic acid and Et3N in THF was activated with Me2CHO2CCl and added to 150 mg II (R2 = OAc) in aqueous NaHCO3 to give 76 mg IV. Among 8 more I prepared were (7-acyl group and R2 given):  
 (3,4-dihydrocarbostyryl-6-oxy)acetyl, H;  
 $\alpha$ -(3,4-dihydrocarbostyryl-6-oxy)propionyl, H;  
 5-methoxy-3,4-dihydrocarbostyryl-6-carbonyl, OAc;  
 8-methoxycoumarin-3-carbonyl, H.  
 IT 62001-03-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 62001-03-0 CAPLUS  
 CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,  
 7-[[[(8-methoxy-2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-3-methyl-8-oxo-,  
 (6R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
 (1 CITINGS)

10/513699

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 298 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1976:19194 CAPLUS  
DOCUMENT NUMBER: 84:19194  
ORIGINAL REFERENCE NO.: 84:3185a,3188a  
TITLE: Azlactone dyes  
INVENTOR(S): Hansen, Guenter; Kermer, Wolf D.  
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.  
SOURCE: Ger. Offen., 16 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2415819	A1	19751016	DE 1974-2415819	19740401 <--
PRIORITY APPLN. INFO.:			DE 1974-2415819	19740401

GI For diagram(s), see printed CA Issue.

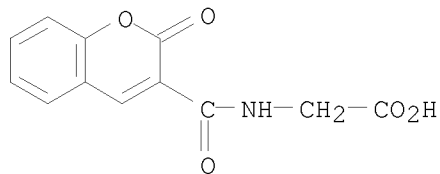
AB Azlactone dyes (I, R, R1 = same or different heterocyclic residues, Z = p-C6H4, p-biphenylene) were prepared and dyed polyester fibers fast, brilliant yellow shades. Thus, H2NCH2CO2H [56-40-6] was treated with 2-thiophenecarbonyl chloride [5271-67-0] to give N-(2-thienoyl)glycine [33955-17-8] which was condensed with p-C6H4(CHO)2 [623-27-8] in Ac2O to give I(R = R1 = 2-thienyl, Z = p-C6H4) [57601-48-6]. The other I were similarly prepared

IT 57601-45-3

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with terephthalaldehyde)

RN 57601-45-3 CAPLUS

CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

10/513699

L9 ANSWER 299 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1975:547696 CAPLUS  
DOCUMENT NUMBER: 83:147696  
ORIGINAL REFERENCE NO.: 83:23211a,23214a  
TITLE: N-Acylating novenamine  
INVENTOR(S): Dolak, Lester A.  
PATENT ASSIGNEE(S): Upjohn Co., USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 3890297	A	19750617	US 1973-346010	19730329 <--

PRIORITY APPLN. INFO.: US 1973-346010 19730329

GI For diagram(s), see printed CA Issue.

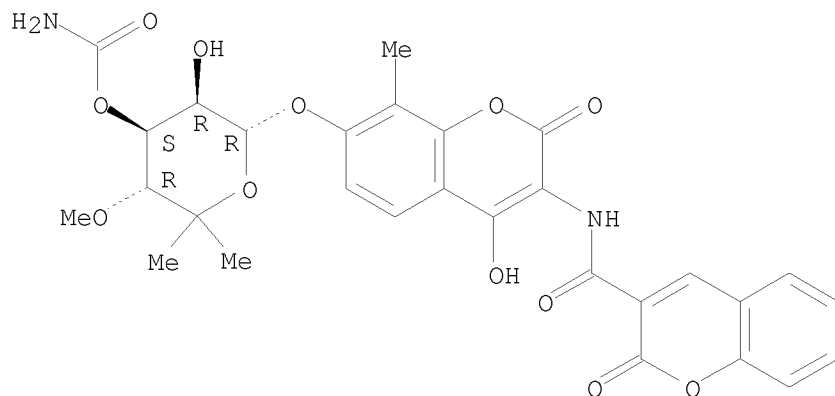
AB About 140 antibacterial (no data) novenamines I [R = 3,4-PhCH<sub>2</sub>(HO)C<sub>6</sub>H<sub>4</sub>CO, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO, Me<sub>2</sub>NCO, 1-adamantanoyl, Me<sub>2</sub>CHCO, etc.) were prepared by acylation of I (R = H).

IT 56785-47-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56785-47-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[7-[[3-O-(aminocarbonyl)-6-deoxy-5-C-methyl-4-O-methyl- $\alpha$ -L-lyxo-hexopyranosyl]oxy]-4-hydroxy-8-methyl-2-oxo-2H-1-benzopyran-3-yl]-2-oxo- (CA INDEX NAME)

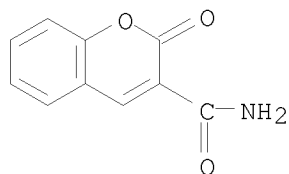
Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)



L9 ANSWER 300 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1975:496943 CAPLUS  
DOCUMENT NUMBER: 83:96943  
ORIGINAL REFERENCE NO.: 83:15217a,15220a  
TITLE: Cyclization of ylidenemalononitriles. VIII.  
Synthesis of coumarins from  
o-methoxybenzylidenemalonitriles  
AUTHOR(S): Campaigne, E.; Mais, Dale E.  
CORPORATE SOURCE: Chem. Lab., Indiana Univ., Bloomington, IN, USA  
SOURCE: Journal of Heterocyclic Chemistry (1975),  
12(2), 267-71  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 83:96943  
GI For diagram(s), see printed CA Issue.  
AB The coumarins I (R = H, Cl; R1 = H, 6-,7-,8-MeO) were prepared by direct  
cyclization of  $\alpha$ -cyano-o-methoxycinnamates (II) in H<sub>2</sub>SO<sub>4</sub>. Alkoxy  
groups other than the o-methoxy group involved in lactone formation are  
not hydrolyzed during the reaction. The 3-cyano group on the resulting  
coumarin is not hydrated in concentrated H<sub>2</sub>SO<sub>4</sub>, but can be converted to the  
carbamido group in 90% sulfuric acid. In certain cases these conditions  
do cleave methoxy substituents on the coumarins. The indenones III can be  
obtained by cyclizing the II with BF<sub>3</sub>.Et<sub>2</sub>O.  
IT 1846-78-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 1846-78-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



L9 ANSWER 301 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1975:459245 CAPLUS

DOCUMENT NUMBER: 83:59245

ORIGINAL REFERENCE NO.: 83:9371a,9374a

TITLE: Reaction of coumarin-3-acid chloride with amino acid methyl esters

AUTHOR(S): El-Naggar, A. M.; Elgamal, M. H. A.; El-Tawil, B. A. H.; Ahmed, F. S. M.

CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Nasr, Egypt

SOURCE: Indian Journal of Chemistry (1975), 13(4), 424

CODEN: IJOCAP; ISSN: 0019-5103

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Coumarin carbonylamino acids I (X = Gly, Ala, Leu, Ser, D-Val, Tyr, D-Phe, Pro, Trp, Thr, and  $\beta$ -alanine residues) were prepared by the action of coumarin-3-acid chloride on amino acid Me esters hydrochloride in dioxane containing Et<sub>3</sub>N. The structures were determined by elemental anal., ir, and uv data.

IT 56159-50-3P 56159-51-4P 56159-52-5P

56159-53-6P 56159-54-7P 56159-55-8P

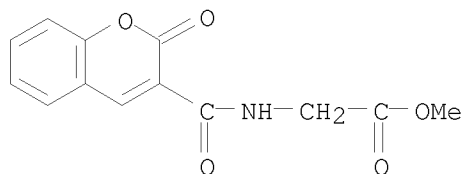
56159-56-9P 56159-57-0P 56159-58-1P

56159-59-2P 56159-60-5P 56159-61-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 56159-50-3 CAPLUS

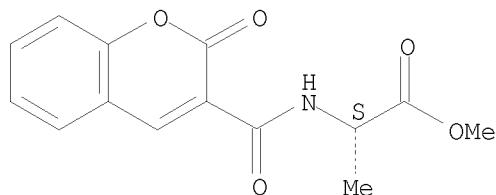
CN Glycine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)



RN 56159-51-4 CAPLUS

CN L-Alanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.

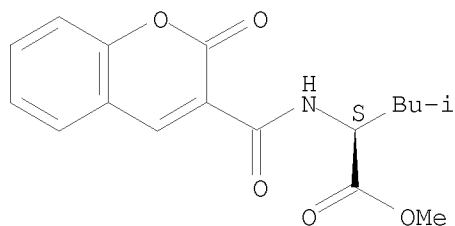


RN 56159-52-5 CAPLUS

CN L-Leucine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

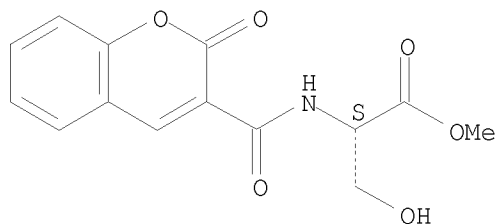
10/513699

Absolute stereochemistry.



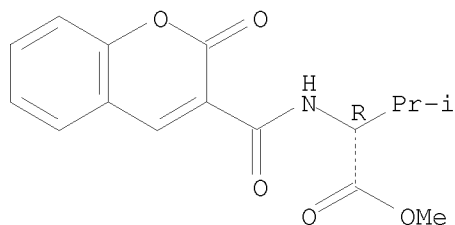
RN 56159-53-6 CAPLUS  
CN L-Serine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.



RN 56159-54-7 CAPLUS  
CN D-Valine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

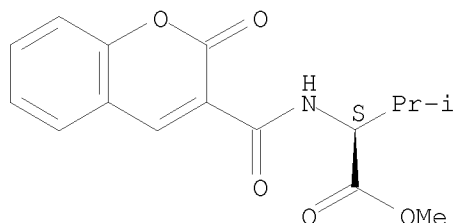
Absolute stereochemistry.



RN 56159-55-8 CAPLUS  
CN L-Valine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.

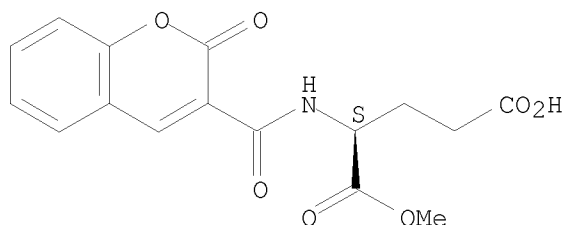
10/513699



RN 56159-56-9 CAPLUS

CN L-Glutamic acid, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, 1-methyl ester  
(CA INDEX NAME)

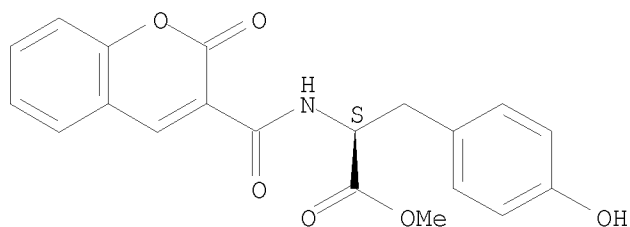
Absolute stereochemistry.



RN 56159-57-0 CAPLUS

CN L-Tyrosine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA  
INDEX NAME)

Absolute stereochemistry.

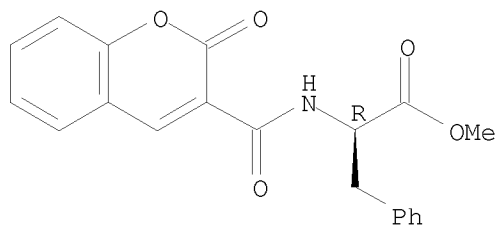


RN 56159-58-1 CAPLUS

CN D-Phenylalanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester  
(CA INDEX NAME)

Absolute stereochemistry.

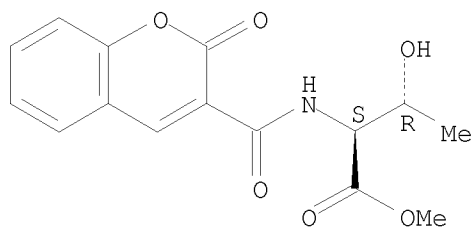
10/513699



RN 56159-59-2 CAPLUS

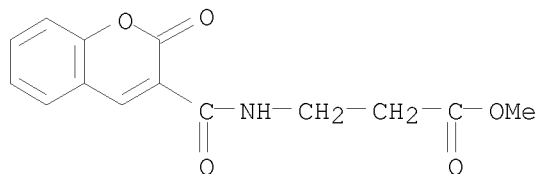
CN L-Threonine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.



RN 56159-60-5 CAPLUS

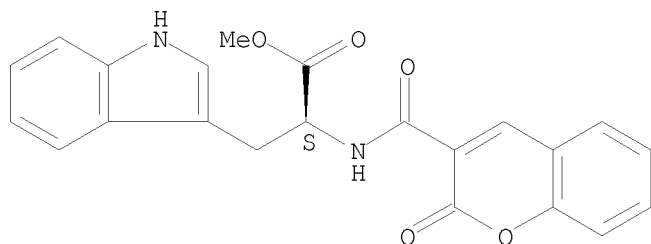
CN  $\beta$ -Alanine, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)



RN 56159-61-6 CAPLUS

CN L-Tryptophan, N-[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.



<12/04/2007>

Erich Leese

10/513699

<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 302 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1975:31212 CAPLUS

DOCUMENT NUMBER: 82:31212

ORIGINAL REFERENCE NO.: 82:4957a,4960a

TITLE: Condensation of 3-carbethoxycoumarins with acetylacetone, ethyl acetoacetate, and ethyl cyanoacetate

AUTHOR(S): Sammour, A.; Abdalla, M.; Elkady, M.

CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt

SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1974), 82(3), 369-73

CODEN: ACASA2; ISSN: 0001-5407

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB 5,2-R(HO)C<sub>6</sub>H<sub>3</sub>CH[CH(CO<sub>2</sub>H)<sub>2</sub>]CH(COMe)<sub>2</sub>, o-HO-C<sub>6</sub>H<sub>4</sub>CH[CH(CO<sub>2</sub>H)<sub>2</sub>]CH(COMe)<sub>2</sub>, and the chromancarboxani-lide I [R = PhNH, R<sub>1</sub> = (MeCO)<sub>2</sub>CH], and the pyranobenzopyran II were prepared by condensation of the coumarins III (R = EtO, R<sub>1</sub> = H, Me, Br; R = PhNH, R<sub>1</sub> = H) with MeCOCH<sub>2</sub>-COMe. III (R = EtO, R<sub>1</sub> = H, Me, Br; R = PhNH, R<sub>1</sub> = H) and MeCOCH<sub>2</sub>CO<sub>2</sub>Et gave the pyranobenzopyrans IV, the dibenzopyran V, and benzopyranopyridine VI (R = Ph, R<sub>1</sub> = MeCO). II (R = OEt, R<sub>1</sub> = H) and NCCH<sub>2</sub>CO<sub>2</sub>Et gave I (R = EtO, R<sub>1</sub> = EtO<sub>2</sub>CCHCONH<sub>2</sub>) and VI (R = H, R<sub>1</sub> = CN).

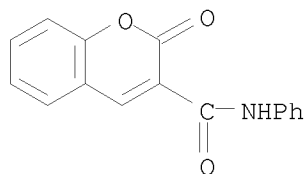
IT 54396-25-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with acetylacetone, ethyl acetylacetate, and ethyl cyanoacetate)

RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L9 ANSWER 303 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1974:451145 CAPLUS  
 DOCUMENT NUMBER: 81:51145  
 ORIGINAL REFERENCE NO.: 81:8179a,8182a  
 TITLE: Oxazolylcoumarin fluorescent whiteners  
 INVENTOR(S): Hotta, Seiji; Izume, Harumi  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 49024222	A	19740304	JP 1972-66100	19720630 <--
JP 50014247	B	19750526		

PRIORITY APPLN. INFO.: JP 1972-66100 A 19720630

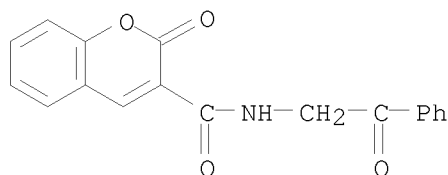
AB (Un)substituted coumarin-3-carbonyl chlorides were condensed with R1COCH(R2)NH2.HCl, and the amino ketones cyclized to give coumarin derivs. I [R1 = (un)substituted aryl, alkyl, R2 = H, (un)substituted aryl, alkyl, R3 = H, halogen, alkyl, HO, alkoxy, dialkylamino, R4 = R3, R1,R2-disubstituted 2-oxazolyl, (R3R4) = ring members]. For example, coumarin-3-carbonyl chloride in dioxane was treated with aqueous BzCH2NH2.HCl and neutralized, and the 3-(phenacylcarbamoyl)coumarin [51980-94-0] was treated with concentrated H2SO4 to give fluorescent whitener I (R1 = Ph, R2 = R3 = R4 = H) [51980-95-1]. Also prepared were, e.g., fluorescent whitener I (R1 = p-ClC6H4, R2 = R3 = R4 = H) [51980-96-2], fluorescent whitener I (R1 = p-MeOC6H4, R2 = R3 = R4 = H) [51980-97-3], fluorescent whitener I (R1 = p-ClC6H4, R2 = R3 = H, R4 = 8-MeO) [51980-98-4], fluorescent whitener I (R1 = Ph, R2 = H, (R3R4) = 5,6-benzol] [51980-99-5], and fluorescent whitener I (R1 = Ph, R2 = R3 = H, R4 = 7-(5-phenyl-2-oxazolyl) [51981-00-1]. The fluorescent whiteners were used for fibers and plastics.

IT 51980-94-0P

RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)

RN 51980-94-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-oxo-2-phenylethyl)- (CA INDEX NAME)





10/513699

L9 ANSWER 304 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1974:438958 CAPLUS  
DOCUMENT NUMBER: 81:38958  
ORIGINAL REFERENCE NO.: 81:6245a,6248a  
TITLE: Oxadiazolylcoumarin fluorescent whiteners  
INVENTOR(S): Davidson, Hugh; Johnson, Keith Trevor; Leggeter, Brian  
E.; Moore, Anthony John  
PATENT ASSIGNEE(S): Hickson and Welch Ltd.  
SOURCE: Ger. Offen., 18 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 2344834	A1	19740321	DE 1973-2344834	19730905 <--
JP 49086423	A	19740819	JP 1973-99345	19730905 <--
JP 53038355	B	19781014		
US 3933842	A	19760120	US 1973-394494	19730905 <--
CH 1279073	D	19760227	CH 1973-12790	19730905 <--
CH 578076	B5	19760730		
GB 1388590	A	19750326	GB 1972-41416	19730906 <--

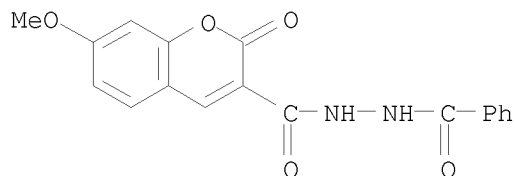
PRIORITY APPLN. INFO.: GB 1972-41416 A 19720906

AB The coumarins I [R = , Et, Me; PhCH<sub>2</sub>; R<sub>1</sub> = 3-substituted-1,2,4-oxadiazol-5-yl and 5-phenyl-1,3,4-oxadiazol-2-yl residues] were prepared and used as light- and washfast fluorescent whiteners for polyester fibers. Thus, reaction of 7-ethoxycoumarin-3-carbonyl chloride with PhC(NH<sub>2</sub>):NOH gave the fluorescent whitener (I, R = Et, R<sub>1</sub> = 3-phenyl-1,2,4-oxadiazol-5-yl) [51868-49-6]. Similarly prepared were 20 other I. Cyclization of 3-[(2-benzoylhydrazino)carbonyl]-7-methoxycoumarin gave fluorescent whitener (I, R = Me, R<sub>1</sub> = 5-phenyl-1,3,4-oxadiazol-2-yl) [51867-57-3].

IT 51867-59-5P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

RN 51867-59-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 7-methoxy-2-oxo-, 2-benzoylhydrazide  
(CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 305 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1972:514185 CAPLUS

DOCUMENT NUMBER: 77:114185

ORIGINAL REFERENCE NO.: 77:18809a,18812a

TITLE: Reactions with 6-substituted 3-carbethoxycoumarins

AUTHOR(S): Sammour, A.; Selim, M. I. B.; Elkady, M.

CORPORATE SOURCE: Fac. Sci. Eng., Ain Shams Univ., Cairo, Egypt

SOURCE: United Arab Republic Journal of Chemistry (

1971), 14(3), 261-74

CODEN: UAJCAZ; ISSN: 0372-3704

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

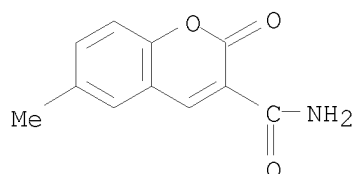
AB 3-Carbethoxycoumarins (I, R = Me, Br, Cl) reacted in C<sub>6</sub>H<sub>6</sub>, MePh, or PhCl with AlCl<sub>3</sub> to give the I 3,4-dihydro derivs. (II). Reaction of I with PhMgBr gave the 2,2,4-triphenyl-3-benzoylchromans, but 4-methyl-6-substituted-coumarins (III) with PhMgBr or p-MeOPhMgBr gave the 2,2-diarylchroman analogs. I with primary amines (XNH<sub>2</sub>, X = Me, Et, Pr, Bu, Ph, o-MeC<sub>6</sub>H<sub>4</sub>, m-MeC<sub>6</sub>H<sub>4</sub>, p-MeC<sub>6</sub>H<sub>4</sub>, o-MeO-C<sub>6</sub>H<sub>4</sub>, p-MeOC<sub>6</sub>H<sub>4</sub>, o-ClC<sub>6</sub>H<sub>4</sub>, p-ClC<sub>6</sub>H<sub>4</sub>,  $\alpha$ -naphthyl,  $\beta$ -naphthyl, furfuryl, PhCH<sub>2</sub>) or secondary amines (piperidine or morpholine) in boiling EtOH gave the 6-substituted N-alkyl(or aryl)-3-coumarincarboxamides. Reaction of I with NH<sub>2</sub>NH<sub>2</sub> in boiling EtOH gave the azine (IV) and malonic dihydrazide. Reaction of I with BzNHNH<sub>2</sub> in boiling EtOH for 5 hr yielded the hydrazides (VI), but I with PhNHNH<sub>2</sub> or BzNHNH<sub>2</sub> for a short time gave 6-substituted 3-coumarincarboxylic acid N-phenylor N-benzoylhydrazides, resp.

IT	38472-55-8P	38472-56-9P	38472-57-0P
	38472-58-1P	38472-59-2P	38472-60-5P
	38472-61-6P	38472-62-7P	38472-63-8P
	38472-64-9P	38472-65-0P	38472-66-1P
	38472-67-2P	38472-68-3P	38472-69-4P
	38485-81-3P	38485-82-4P	38485-83-5P
	38485-84-6P	38485-85-7P	38485-86-8P
	38485-87-9P	38485-88-0P	38485-89-1P
	38485-90-4P	38485-91-5P	38485-92-6P
	38485-93-7P	38485-94-8P	38485-95-9P
	38485-96-0P	38485-97-1P	38485-98-2P
	38485-99-3P	38486-00-9P	38486-01-0P
	38486-02-1P	38486-03-2P	38486-04-3P
	38486-05-4P	38486-06-5P	38486-07-6P
	38486-08-7P	38486-09-8P	38486-13-4P
	38486-14-5P	38532-88-6P	38543-18-9P
	38543-19-0P	38804-22-7P	

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 38472-55-8 CAPLUS

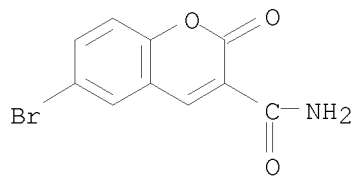
CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo- (CA INDEX NAME)



10/513699

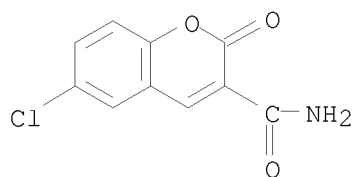
RN 38472-56-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo- (CA INDEX NAME)



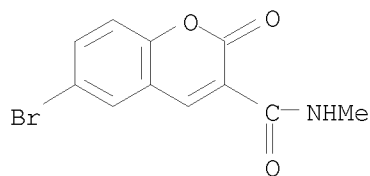
RN 38472-57-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-2-oxo- (CA INDEX NAME)



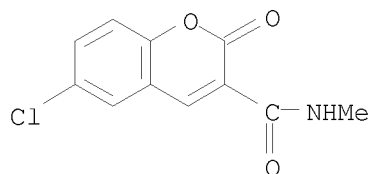
RN 38472-58-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-methyl-2-oxo- (CA INDEX NAME)



RN 38472-59-2 CAPLUS

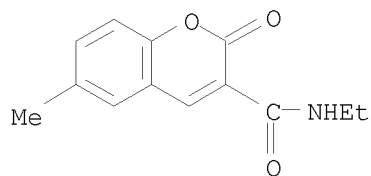
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-methyl-2-oxo- (CA INDEX NAME)



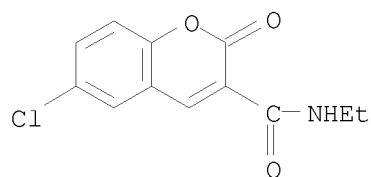
RN 38472-60-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-ethyl-6-methyl-2-oxo- (CA INDEX NAME)

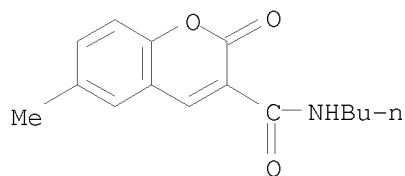
10/513699



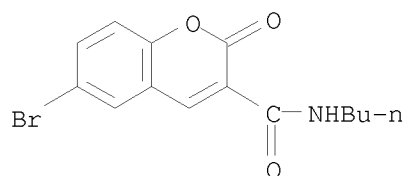
RN 38472-61-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-ethyl-2-oxo- (CA INDEX NAME)



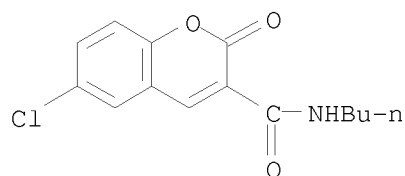
RN 38472-62-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-butyl-6-methyl-2-oxo- (CA INDEX NAME)



RN 38472-63-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-butyl-2-oxo- (CA INDEX NAME)



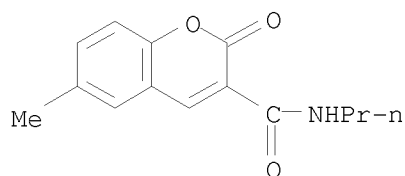
RN 38472-64-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-butyl-6-chloro-2-oxo- (CA INDEX NAME)



10/513699

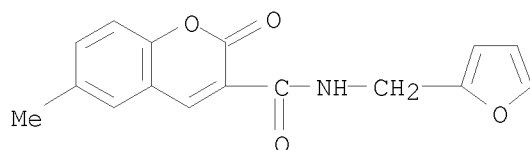
RN 38472-65-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo-N-propyl- (CA INDEX NAME)



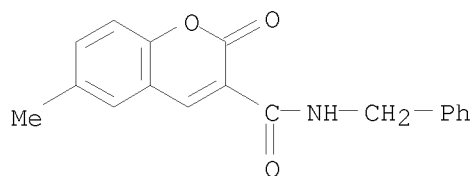
RN 38472-66-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-furanylmethyl)-6-methyl-2-oxo- (CA INDEX NAME)



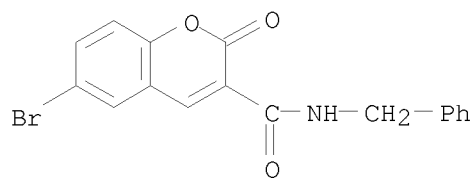
RN 38472-67-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



RN 38472-68-3 CAPLUS

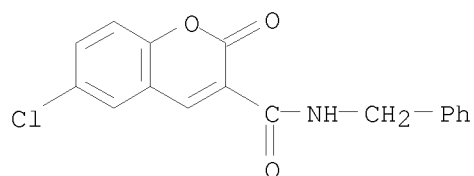
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



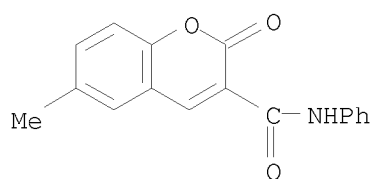
RN 38472-69-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-2-oxo-N-(phenylmethyl)- (CA INDEX NAME)

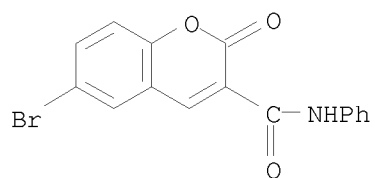
10/513699



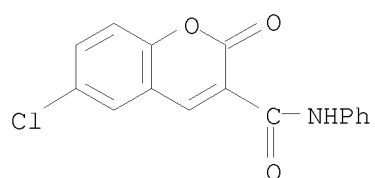
RN 38485-81-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-2-oxo-N-phenyl- (CA INDEX NAME)



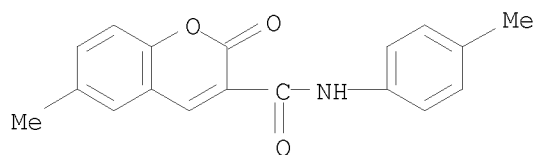
RN 38485-82-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-phenyl- (CA INDEX NAME)



RN 38485-83-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-2-oxo-N-phenyl- (CA INDEX NAME)



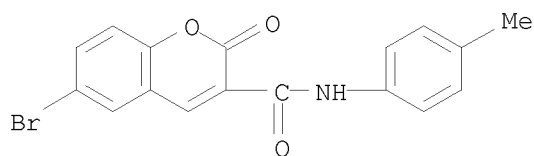
RN 38485-84-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



10/513699

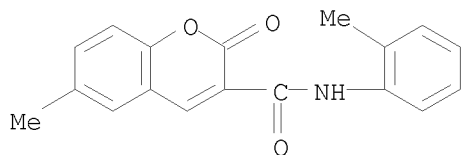
RN 38485-85-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-methylphenyl)-2-oxo- (CA  
INDEX NAME)



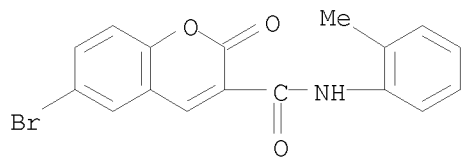
RN 38485-86-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-N-(2-methylphenyl)-2-oxo- (CA  
INDEX NAME)



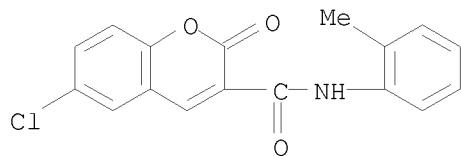
RN 38485-87-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-methylphenyl)-2-oxo- (CA  
INDEX NAME)



RN 38485-88-0 CAPLUS

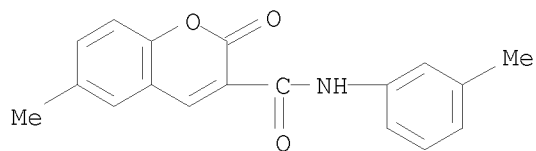
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(2-methylphenyl)-2-oxo- (CA  
INDEX NAME)



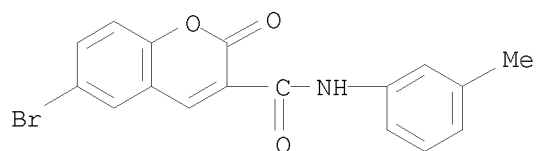
RN 38485-89-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-N-(3-methylphenyl)-2-oxo- (CA  
INDEX NAME)

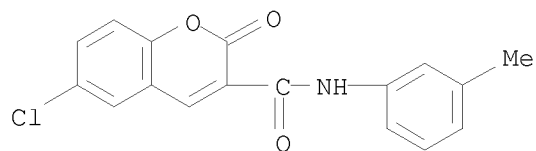
10/513699



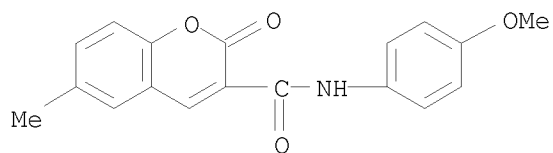
RN 38485-90-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3-methylphenyl)-2-oxo- (CA  
INDEX NAME)



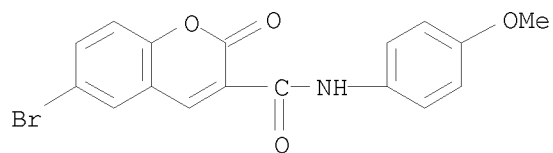
RN 38485-91-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(3-methylphenyl)-2-oxo- (CA  
INDEX NAME)



RN 38485-92-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-6-methyl-2-oxo- (CA  
INDEX NAME)



RN 38485-93-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-methoxyphenyl)-2-oxo- (CA  
INDEX NAME)

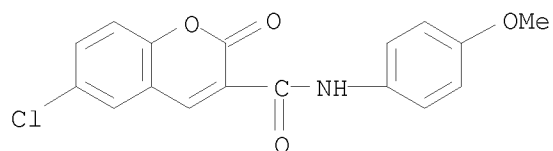


RN 38485-94-8 CAPLUS

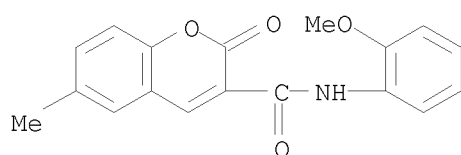


10/513699

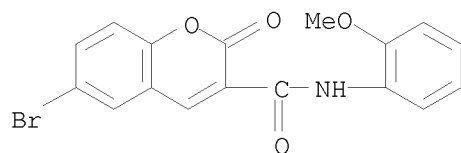
RN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-methoxyphenyl)-2-oxo- (CA  
CN INDEX NAME)



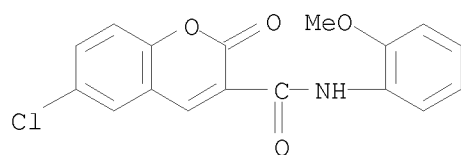
RN 38485-95-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methoxyphenyl)-6-methyl-2-oxo- (CA  
INDEX NAME)



RN 38485-96-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-methoxyphenyl)-2-oxo- (CA  
INDEX NAME)

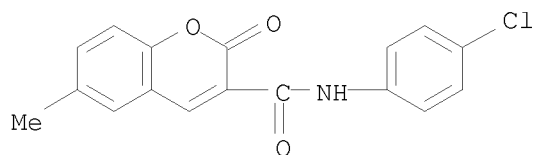


RN 38485-97-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(2-methoxyphenyl)-2-oxo- (CA  
INDEX NAME)



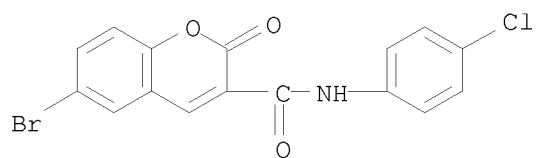
RN 38485-98-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-6-methyl-2-oxo- (CA  
INDEX NAME)

10/513699



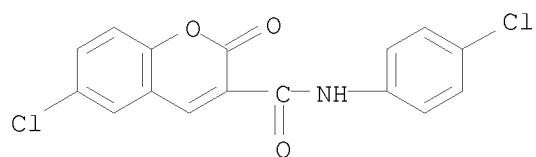
RN 38485-99-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



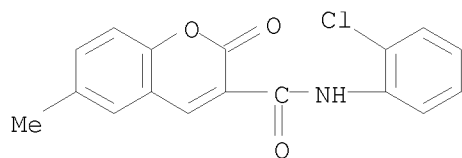
RN 38486-00-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



RN 38486-01-0 CAPLUS

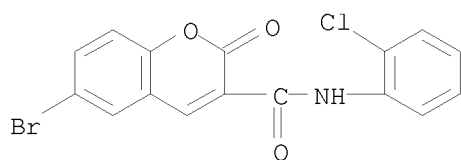
CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-6-methyl-2-oxo- (CA INDEX NAME)



RN 38486-02-1 CAPLUS

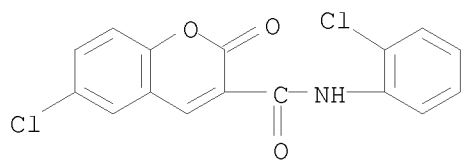
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-chlorophenyl)-2-oxo- (CA INDEX NAME)

10/513699



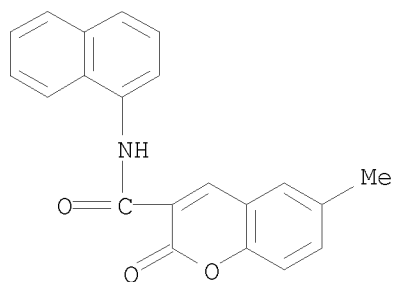
RN 38486-03-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(2-chlorophenyl)-2-oxo- (CA INDEX NAME)



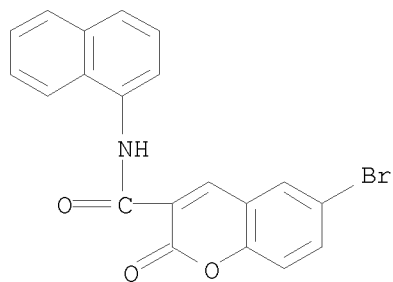
RN 38486-04-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-N-1-naphthalenyl-2-oxo- (CA INDEX NAME)



RN 38486-05-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-1-naphthalenyl-2-oxo- (CA INDEX NAME)



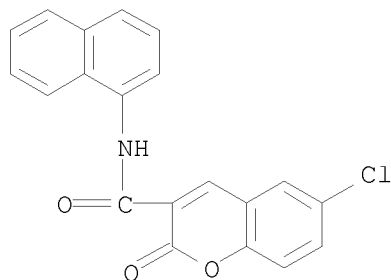
RN 38486-06-5 CAPLUS

<12/04/2007>

Erich Leese

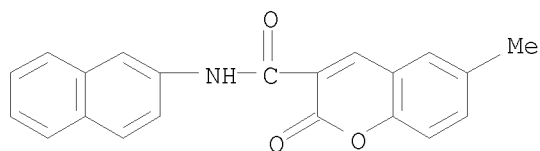
10/513699

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-1-naphthalenyl-2-oxo- (CA INDEX NAME)



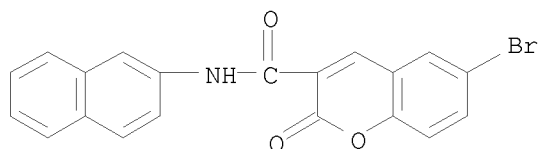
RN 38486-07-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-methyl-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



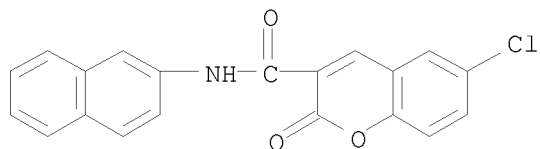
RN 38486-08-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



RN 38486-09-8 CAPLUS

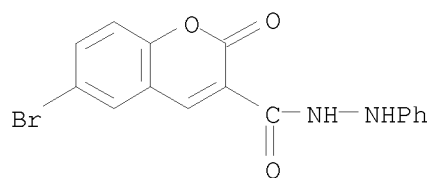
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



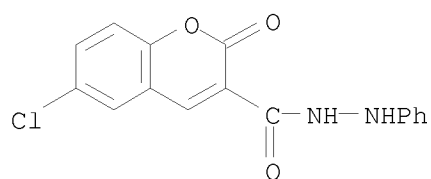
RN 38486-13-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-bromo-2-oxo-, 2-phenylhydrazide (CA INDEX NAME)

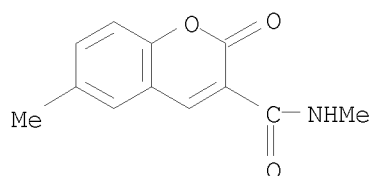
10/513699



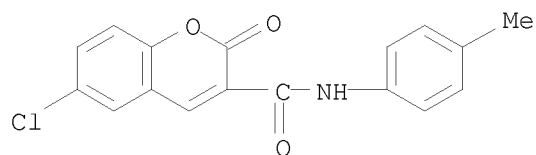
RN 38486-14-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 6-chloro-2-oxo-, 2-phenylhydrazide (CA INDEX NAME)



RN 38532-88-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N,6-dimethyl-2-oxo- (CA INDEX NAME)

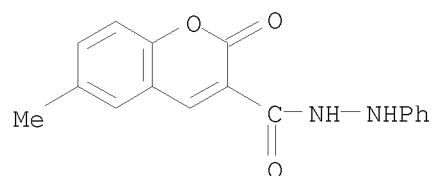


RN 38543-18-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



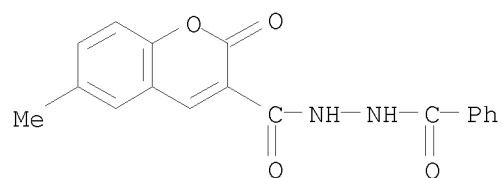
RN 38543-19-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 6-methyl-2-oxo-, 2-phenylhydrazide (CA INDEX NAME)

10/513699



RN 38804-22-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-methyl-2-oxo-, 2-benzoylhydrazide  
(CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L9 ANSWER 306 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1972:126712 CAPLUS

DOCUMENT NUMBER: 76:126712

ORIGINAL REFERENCE NO.: 76:20513a,20516a

TITLE: Benzopyrones. VIII. Mono- and  
ditetrazol-5-ylchromones. Infrared cyano-absorption  
of 4-oxochromenecarbonitriles

AUTHOR(S): Ellis, G. P.; Shaw, D.

CORPORATE SOURCE: Inst. Sci. Technol., Univ. Wales, Cardiff, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions  
1: Organic and Bio-Organic Chemistry (1972-1999) (1972), (6), 779-83  
CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

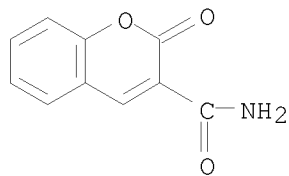
AB Chromones containing a CN group in the 2-, 6-, or 8-positions, or at both C-2 and C-6, were prepared; ir absorption of a CN group at C-6 or C-8 was of normal intensity but that of a group at C-2 was not observable at concns. commonly used. It was suggested that this low intensity was due to the impossibility of resonance interaction between the 2-CN and the chromone hetero-O. Successive amidification and dehydration of di-Et 4-oxo-2,6-chromenedicarboxylate and Et 7-(ethoxycarbonyl)methoxy-4-oxo-2-chromenecarboxylate gave Et 2-cyano-4-oxo-6-chromenecarboxylate and 2-cyano-7-(ethoxycarbonyl)-methoxy-4-oxochromene, resp. Three (tetrazol-5-yl)chromonecarboxylic acids, 2 of their Et esters, and 2,6-di(tetrazol-5-yl)-chromone, prepared from the corresponding nitriles, have high antiallergic activity; but, 4-methyl-3-(tetrazol-5-yl)coumarin is inactive.

IT 1846-78-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)

10/513699

L9 ANSWER 307 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1971:87758 CAPLUS

DOCUMENT NUMBER: 74:87758

ORIGINAL REFERENCE NO.: 74:14237a,14240a

TITLE: Reactions with 3-carbethoxycoumarin and  
3-hydroxycoumarin

AUTHOR(S): Sammour, Abdel-Maged A.; Marei, Abdelfattah; El Ashry,  
S.

CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt

SOURCE: United Arab Republic Journal of Chemistry (  
1970), 13(3), 281-95

CODEN: UAJCAZ; ISSN: 0372-3704

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

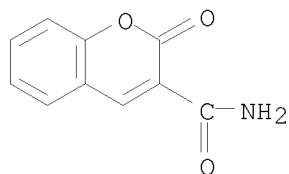
AB NH<sub>3</sub>, BuNH<sub>2</sub>, PhCH<sub>2</sub>NH<sub>2</sub>, or 2-furfurylamine refluxed 1 hr with  
3-(carbethoxy)-coumarin (I) in EtOH, C<sub>6</sub>H<sub>6</sub> or xylene gave, resp., II (R =  
H), II (R = Bu), II (R = PhCH<sub>2</sub>), and II (R = 2-furfuryl). Similarly  
obtained were 6 other II. Xanthidrol in aqueous EtOH-AcOH, containing II  
heated  
40 min at 85° gave the corresponding III. Piperidine and I  
refluxed 5 hr gave 70 IV. (NH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub> refluxed 1 hr in EtOH, containing I gave  
65 V. Similar reactions were observed with 3-hydroxycoumarin.

IT 1846-78-2P 1846-83-9P 1846-90-8P  
30982-47-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

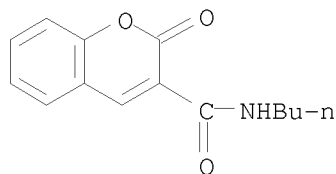
RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



RN 1846-83-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-butyl-2-oxo- (CA INDEX NAME)

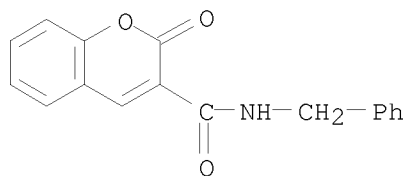


RN 1846-90-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)

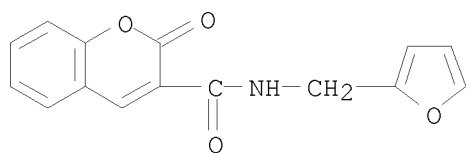


10/513699



RN 30982-47-9 CAPLUS

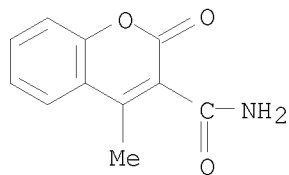
CN 2H-1-Benzopyran-3-carboxamide, N-(2-furanylmethyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 3

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L9 ANSWER 308 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1970:12491 CAPLUS  
 DOCUMENT NUMBER: 72:12491  
 ORIGINAL REFERENCE NO.: 72:2265a  
 TITLE: 4-Hydroxycoumarins. IX. Chlorination of  
 4-hydroxycoumarin and reactions of 4-chlorocoumarin  
 with sodium derivatives of esters and ketones  
 containing an active methylene group  
 AUTHOR(S): Checchi, Silvio; Pecori Vettori, Lorenzo; Pinzauti,  
 Sergio  
 CORPORATE SOURCE: Ist. Chim. Farm., Univ. Firenze, Florence, Italy  
 SOURCE: Gazzetta Chimica Italiana (1969), 99(5),  
 501-13  
 CODEN: GCITA9; ISSN: 0016-5603  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Italian  
 GI For diagram(s), see printed CA Issue.  
 AB Reaction of 4-hydroxycoumarin with POCl<sub>3</sub> gave 4-chlorocoumarin (I, R = Cl)  
 and 4-chloro-3,4':3',4''-tercoumarin (II), m. 325-7° (HCONMe<sub>2</sub>).  
 The following I were obtained by condensation of I (R = Cl) with the  
 corresponding amines and by other conventional methods (R and m.p. given):  
 PhNH, 258-60°; p-MeC<sub>6</sub>H<sub>4</sub>NH, 265-7°; m-MeC<sub>6</sub>H<sub>4</sub>NH,  
 208-10°; o-MeOC<sub>6</sub>H<sub>4</sub>NH, 206-8°; p-EtO-C<sub>6</sub>H<sub>4</sub>NH, 220-22°;  
 β-naphthylamino, 258-60°; p-ClC<sub>6</sub>H<sub>4</sub>NH, 286-8°; PhCH<sub>2</sub>NH,  
 240-2°; α-pyridylamino, 220-22°; CH(CN)CO<sub>2</sub>Et,  
 134-6°; CH(CO<sub>2</sub>Et)<sub>2</sub>, 98-100°; CHAcCO<sub>2</sub>Et, 106-8°;  
 CHAc<sub>2</sub>, 155-7°; CH(CONH<sub>2</sub>)CO<sub>2</sub>Et, 196-8°; CH<sub>2</sub>CN,  
 158-60°; CH<sub>2</sub>CO<sub>2</sub>H, 178-80°; CH<sub>2</sub>CONH<sub>2</sub>, 225°; CH<sub>2</sub>CO<sub>2</sub>Et,  
 118-20°; CH<sub>2</sub>COCl, 116-18°; CH<sub>2</sub>Ac, 182-4°; CH<sub>2</sub>CMe:NOH,  
 151-3°. Also prepared were the following III (same data given): PhNH,  
 285-6°; p-MeC<sub>6</sub>H<sub>4</sub>NH, 288-90°; m-MeC<sub>6</sub>H<sub>4</sub>NH, 288-90°;  
 o-MeOC<sub>6</sub>H<sub>4</sub>NH, 280-2°; p-EtOC<sub>6</sub>H<sub>4</sub>NH, 225-6°; p-ClC<sub>6</sub>H<sub>4</sub>NH,  
 298-9°; morpholino, 210-12°; PhCH<sub>2</sub>NH, 276-8°. Also  
 prepared were IV (R = CN), m. 193-5°, and IV (R = CO-NH<sub>2</sub>).  
 IT 24526-68-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 24526-68-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 4-methyl-2-oxo- (CA INDEX NAME)



L9 ANSWER 309 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1969:47227 CAPLUS

DOCUMENT NUMBER: 70:47227

ORIGINAL REFERENCE NO.: 70:8851a,8854a

TITLE: Synthesis of coumarin derivatives. XX. Synthesis and antibacterial activity of derivatives of N-substituted coumarin-3-carboxamide

AUTHOR(S): Ichikawa, Masataka; Ichibagase, Hisashi

CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, Japan

SOURCE: Chemical &amp; Pharmaceutical Bulletin (1968),

16(11), 2093-100

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 70:47227

AB N-Substituted 6-nitro- and 7-nitro-3-coumarincarboxamides were prepared from the corresponding acids by the Schotten-Baumann reaction.

N-(2-Pyridyl)-7-nitro-8-hydroxy- and

N-(2-pyridyl)-7-nitro-8-methoxy-3-coumarincarboxamide were also prepared by the fusing of these ethyl esters and 2-aminopyridine. All of

N-substituted nitro-3-coumarincarboxamides were converted to the corresponding N-substituted amino-3-coumarincarboxamides by a catalytic

reduction and then the acetamido and the nitrofurfurylidene derivs. were finally prepared Antibacterial tests of these derivs. on tubercle bacilli

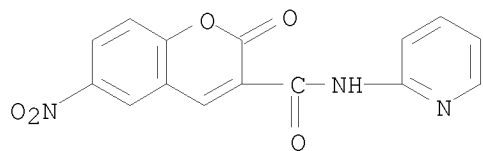
were carried out and some N-(2-pyridyl) amide and nitrofurfurylidene derivs. showed a strong activity.

IT 21074-69-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 21074-69-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-2-pyridinyl- (CA INDEX NAME)



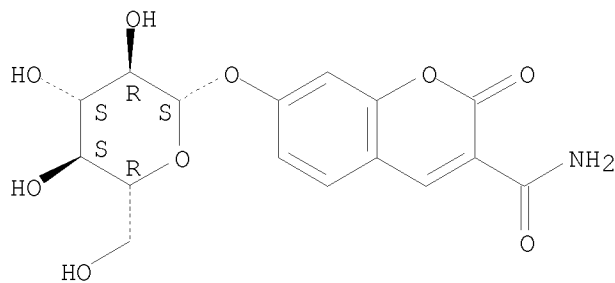
OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

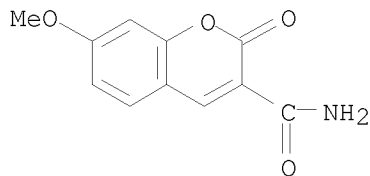
10/513699

L9 ANSWER 310 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1968:444174 CAPLUS  
DOCUMENT NUMBER: 69:44174  
ORIGINAL REFERENCE NO.: 69:8299a,8302a  
TITLE: Some 7-( $\beta$ -D-glucopyranosyloxy)coumarins for use  
as fluorogenic substrates  
AUTHOR(S): Sherman, William R.; Robins, Eli  
CORPORATE SOURCE: Sch. of Med., Washington Univ., St. Louis, MO, USA  
SOURCE: Carbohydrate Research (1968), 7(2), 184-92  
CODEN: CRBRAT; ISSN: 0008-6215  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI For diagram(s), see printed CA Issue.  
AB Several 7-( $\beta$ -D-glucopyranosyloxy) derivs. of 3-substituted coumarins  
were synthesized as potential substrates for the enzyme  
 $\beta$ -D-glucosidase. Two of these were prepared by Knoevenagel  
condensation of 4-( $\beta$ -D-glucopyranosyloxy)-2-hydroxybenzaldehyde with  
Et acetoacetate and Et cyanoacetate, resp.  
3-Acetyl-7-( $\beta$ -D-glucopyranosyloxy)-coumarin (I), was hydrolyzed by  
 $\beta$ -D-glucosidase 1.9 times that of  
7-( $\beta$ -D-glucopyranosyloxy)-4-methylcoumarin. This behavior provides a  
method potentially more sensitive than established procedures for the  
measurement of  $\beta$ -D-glucosidase activity.  
IT 20943-18-4P 21052-47-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 20943-18-4 CAPLUS  
CN Coumarin, 3-carbamoyl-7-( $\beta$ -D-glucopyranosyloxy)- (8CI) (CA INDEX  
NAME)

Absolute stereochemistry.



RN 21052-47-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

<12/04/2007>

Erich Leese

10/513699

(1 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 311 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1968:402804 CAPLUS

DOCUMENT NUMBER: 69:2804

ORIGINAL REFERENCE NO.: 69:535a,538a

TITLE: Coumarin derivatives of pharmaceutical interest

AUTHOR(S): Selleri, R.; Orzalesi, G.; Caldini, O.; Spano, R.;  
Ferretti, G.CORPORATE SOURCE: Soc. Italo-Britannica L. Manetti, H. Roberts Co.,  
Florence, ItalySOURCE: Bollettino Chimico Farmaceutico (1967),  
106(10), 680-7

CODEN: BCFAAI; ISSN: 0006-6648

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AB Compds. of the general formula I are prepared A mixture of 0.05M 6-carbomethoxycoumarin-3-carboxylic acid and 200 ml. SOCl<sub>2</sub> is refluxed 2-4 hrs. and the acid chloride treated with 0.1 mole NH<sub>3</sub> to give Me 3-carbamoylcoumarin-6-carboxylate, m. 274° (MeOH). Similarly prepared are the following I (R, R<sub>1</sub>, R<sub>2</sub>, and m.p. given): H, H, Et, 259° (EtOH); H, Pr, Me, 183° (MeOH); H, Pr, Et, 166° (EtOH); H, Bu, Me, 181° (MeOH); H, Bu, Et, 142° (EtOH); Me, Me, Me, 178° (MeOH); Me, Me, Et, 152° (EtOH); Et, Et, Me, 154° (MeOH); Et, Et, Et, 133° (EtOH); (NRR<sub>1</sub> =) pyrrolidino, -, Me, 155° (MeOH); (NRR<sub>1</sub> =) pyrrolidino, -, Et, 184° (EtOH); (NRR<sub>1</sub> =) morpholino, -, Me, 238° (MeOH); (NRR<sub>1</sub> =) morpholino, -, Et, 185° (EtOH); H, Ph, Me, 208° (MeOH); H, Ph, Et, 206° (HOAc); H, PhCH<sub>2</sub>, Me, 202° (MeOH); H, PhCH<sub>2</sub>, Et, 187° (EtOH); H, p-EtOC<sub>6</sub>H<sub>4</sub>, Me, 227° (MeOH); H, p-EtOC<sub>6</sub>H<sub>4</sub>, Et, 213° (EtOH); H, p-EtO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>, Me, 246° (HOAc); H, p-EtO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>, Et, 235° (HOAc); H, p-MeSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>, Me, 297° (MeOH); H, p-MeSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>, Et, 266° (EtOH); H, CONH<sub>2</sub>, Me, 256° (MeOH); and H, CONH<sub>2</sub>, Et, 250° (EtOH). Also prepared were I (R = H, R<sub>1</sub> = 1-phenyl-2,3-dimethyl-5-oxo-3-pyrazolin-4-yl, R<sub>2</sub> = Me) (II), m. 230° (HOAc); and I (R = H, R<sub>1</sub> = 1-phenyl-2,3-dimethyl-5-oxo-3-pyrazolin-4-yl, R<sub>1</sub> = Et) (III), m. 191° (HOAc). II and III demonstrate analgesic activity in mice. I (R = R<sub>1</sub> = Et, R<sub>2</sub> = Me) increases respiration and blood pressure in rabbits.

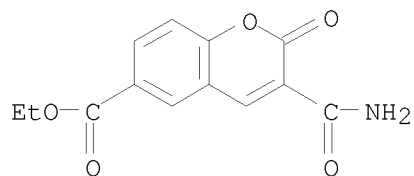
IT	7734-84-1P	16409-08-8P	16409-09-9P
	16409-88-4P	16409-89-5P	18439-71-9P
	18439-73-1P	18439-75-3P	18439-84-4P
	18439-85-5P	18439-86-6P	18439-87-7P
	18439-88-8P	18439-89-9P	18439-90-2P
	18439-91-3P	18439-92-4P	18439-93-5P
	18439-94-6P	18543-84-5P	

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 7734-84-1 CAPLUS

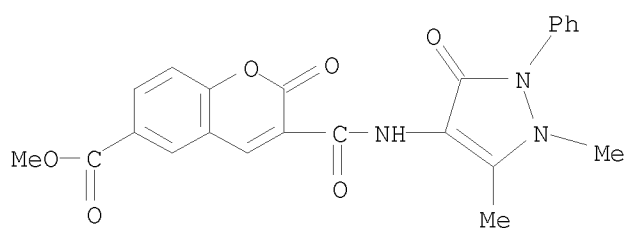
CN 2H-1-Benzopyran-6-carboxylic acid, 3-(aminocarbonyl)-2-oxo-, ethyl ester  
(CA INDEX NAME)

10/513699



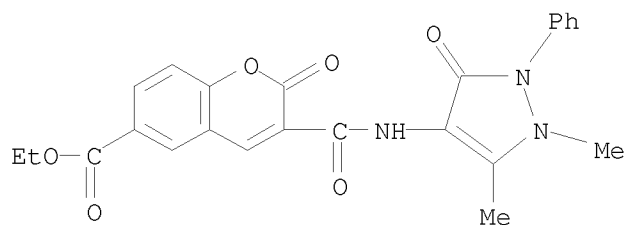
RN 16409-08-8 CAPLUS

CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)



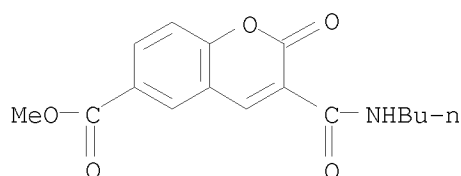
RN 16409-09-9 CAPLUS

CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)amino]carbonyl]-2-oxo-, ethyl ester (CA INDEX NAME)



RN 16409-88-4 CAPLUS

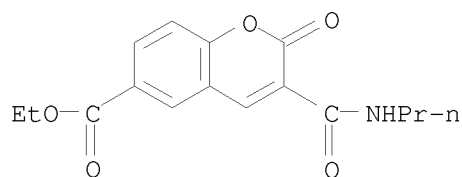
CN 2H-1-Benzopyran-6-carboxylic acid, 3-[(butylamino)carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)



RN 16409-89-5 CAPLUS

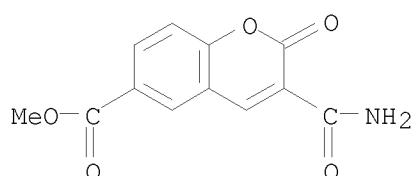
CN 2H-1-Benzopyran-6-carboxylic acid, 2-oxo-3-[(propylamino)carbonyl]-, ethyl ester (CA INDEX NAME)

10/513699



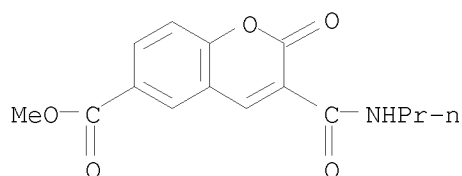
RN 18439-71-9 CAPLUS

CN 2H-1-Benzopyran-6-carboxylic acid, 3-(aminocarbonyl)-2-oxo-, methyl ester  
(CA INDEX NAME)



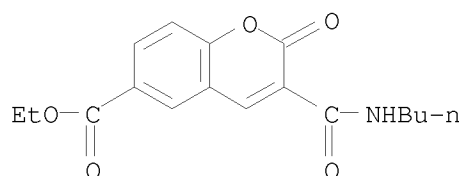
RN 18439-73-1 CAPLUS

CN 2H-1-Benzopyran-6-carboxylic acid, 2-oxo-3-[(propylamino)carbonyl]-,  
methyl ester (CA INDEX NAME)



RN 18439-75-3 CAPLUS

CN 2H-1-Benzopyran-6-carboxylic acid, 3-[(butylamino)carbonyl]-2-oxo-, ethyl  
ester (CA INDEX NAME)

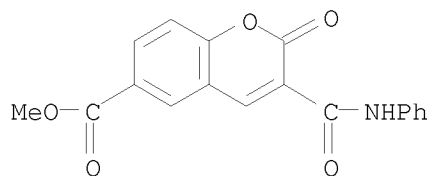


RN 18439-84-4 CAPLUS

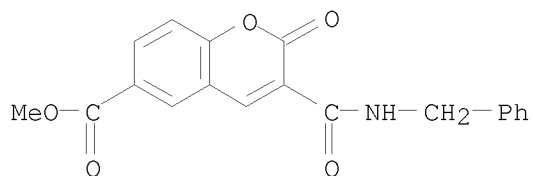
CN 2H-1-Benzopyran-6-carboxylic acid, 2-oxo-3-[(phenylamino)carbonyl]-,  
methyl ester (CA INDEX NAME)



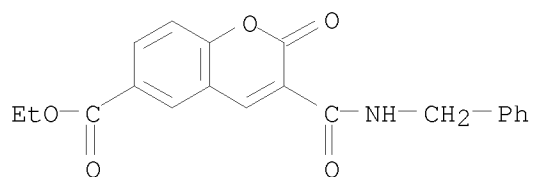
10/513699



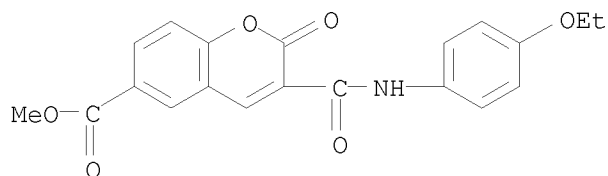
RN 18439-85-5 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
2-oxo-3-[[ (phenylmethyl)amino]carbonyl]-, methyl ester (CA INDEX NAME)



RN 18439-86-6 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
2-oxo-3-[[ (phenylmethyl)amino]carbonyl]-, ethyl ester (CA INDEX NAME)

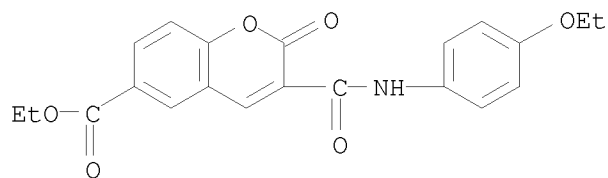


RN 18439-87-7 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (4-ethoxyphenyl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)

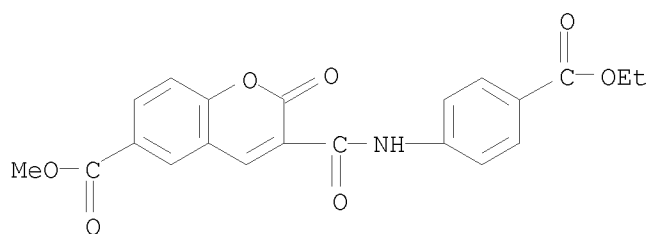


RN 18439-88-8 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (4-ethoxyphenyl)amino]carbonyl]-2-oxo-, ethyl ester (CA INDEX NAME)

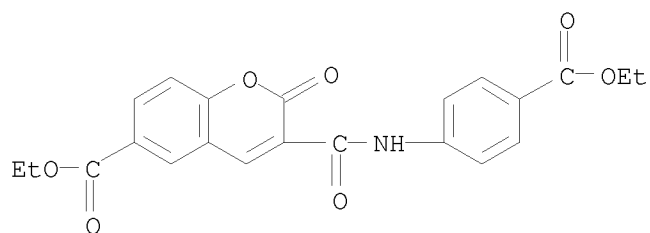
10/513699



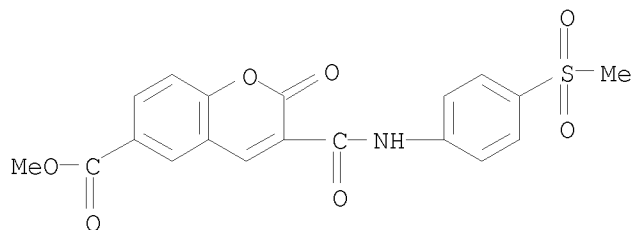
RN 18439-89-9 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[[4-(ethoxycarbonyl)phenyl]amino]carbonyl]-2-oxo-, methyl ester (CA  
INDEX NAME)



RN 18439-90-2 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[[4-(ethoxycarbonyl)phenyl]amino]carbonyl]-2-oxo-, ethyl ester (CA  
INDEX NAME)

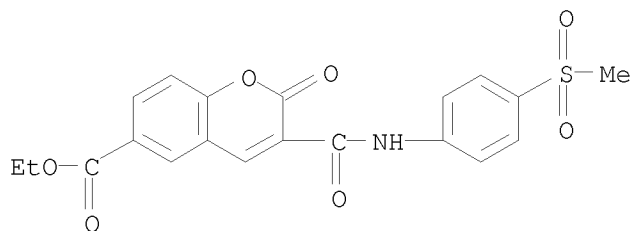


RN 18439-91-3 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[[4-(methoxysulfonyl)phenyl]amino]carbonyl]-2-oxo-, methyl ester (CA  
INDEX NAME)

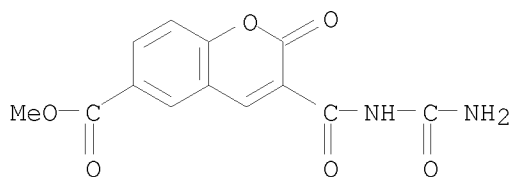


10/513699

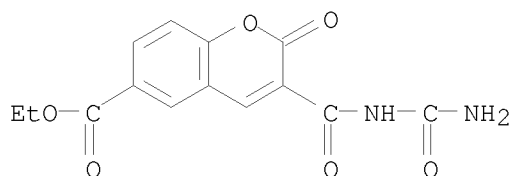
RN 18439-92-4 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[[4-(methylsulfonyl)phenyl]amino]carbonyl]-2-oxo-, ethyl ester (CA  
INDEX NAME)



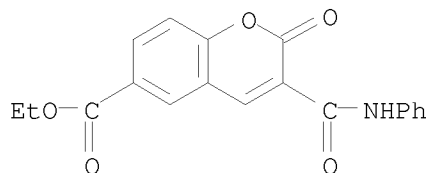
RN 18439-93-5 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (aminocarbonyl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)



RN 18439-94-6 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (aminocarbonyl)amino]carbonyl]-2-oxo-, ethyl ester (CA INDEX NAME)



RN 18543-84-5 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid, 2-oxo-3-[(phenylamino)carbonyl]-, ethyl  
ester (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

<12/04/2007>

Erich Leese

10/513699

<12/04/2007>

Erich Leese

L9 ANSWER 312 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1968:109904 CAPLUS

DOCUMENT NUMBER: 68:109904

ORIGINAL REFERENCE NO.: 68:21219a,21222a

TITLE: Fluorescence of substituted 7-hydroxycoumarins

AUTHOR(S): Sherman, William R.; Robins, Eli

CORPORATE SOURCE: Washington Univ. Sch. of Med., St. Louis, MO, USA

SOURCE: Analytical Chemistry (1968), 40(4), 803-5

CODEN: ANCHAM; ISSN: 0003-2700

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The fluorescence of the 3-(R-substituted)-7-hydroxycoumarins (I) and the 4-(R-substituted)-7-hydroxycoumarins (II), was studied [compound, R, maximum excitation wavelength (m $\mu$ ), maximum wavelength of 1st-order Raman scattering (m $\mu$ ), maximum fluorescence wavelength (m $\mu$ ), relative fluorescence intensity, wavelength of maximum absorption (m $\mu$ ), molar absorptivity, given]: II, Me, 367, 416, 449, 1.0, 359, 17,000; I, H, 376, 422, 454, 0.96, 365, 18,500; II, Ph, 365, 414, 515, 1.2 + 10<sup>-2</sup>, 372, 17,700; I, Bz, 415, 476, 468, 6.4 + 10<sup>-4</sup>, 412, 43,000; I, CO<sub>2</sub>H, 396, 453, 450, 1.9, 385, 36,700; I, CONH<sub>2</sub>, 398, 456, 445, 2.5, 400, 39,300; I, Ph, 420, 481, 456, 2.7, 412, 37,700; I, Ac, 419, 480, 458, 3.1, 4.3, 43,500; I, CO<sub>2</sub>Et, 398, 456, 445, 3.6, 402, 38,700; I, CN, 408, 469, 450, 3.6, 407, 41,600. I (R = CONH<sub>2</sub>, III) was prepared from crude 7-hydroxycoumarin-3-carbonyl chloride (IV), which was prepared by refluxing 10 g. I (R = CO<sub>2</sub>H) for 1 hr. with a mixture of 20 ml. SOCl<sub>2</sub> and 1,4-dioxane. The solution was cooled to room temperature and an 88% yield of crude IV

precipitated with

light petroleum ether, adding, if necessary, a small amount of C<sub>6</sub>H<sub>6</sub> to maintain phase homogeneity. Crude IV (2.8 g.) was dissolved in 100 ml. anhydrous 1,4-dioxane and treated 10 min. with anhydrous NH<sub>3</sub>. The resulting precipitate was washed with M HOAc, dissolved in 20 ml. of HCONMe<sub>2</sub>, and

gradually

diluted with an equal volume of H<sub>2</sub>O while bringing the solution to a boil. The solution was cooled to give a 59% yield of III (decomposing 303°). A possible correlation was observed between the Hammett  $\sigma$  consts. of R in I and fluorescence. The data correlate best with the Hammett  $\sigma$  values obtained for the meta-substituted benzoic acids.

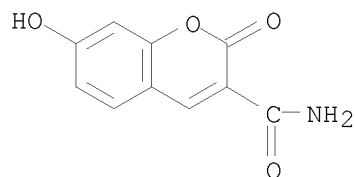
IT 19088-69-8

RL: PRP (Properties)

(fluorescence and Raman and visible and uv spectrum of)

RN 19088-69-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-hydroxy-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L9 ANSWER 313 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1968:2776 CAPLUS

DOCUMENT NUMBER: 68:2776

ORIGINAL REFERENCE NO.: 68:519a,522a

TITLE: Coumarin-7-carboxylic acids

AUTHOR(S): Cingolani, Enrico; Cancelliere, Anna; Salamon, Loredana

CORPORATE SOURCE: Lab. Biol. Ist. Super di Sanita, Rome, Italy

SOURCE: Annali di Chimica (Rome, Italy) (1967),  
57(3), 203-20

CODEN: ANCRAI; ISSN: 0003-4592

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AB A number of coumarin derivs. based on the Knoevenagel reaction were prepared. Condensation of 3-hydroxy-4-formylbenzoic acid (I) with malonic acid (II) and Na cyanoacetate (III) by means of the Knoevenagel reaction produced 3,7-dicarboxycoumarin (IV). The same reaction between I, III, and the Et ester or cyano derivative of II gave 3,7-dicarbethoxycoumarin and 3-cyano-7-carbethoxycoumarin, resp. In conflict with previously reported data, condensation of the ethyl ester of I with Et cyanoacetate in the Knoevenagel reaction gave 3-carbethoxy-7-carboxycoumarin (V) instead of the expected 3-cyano derivative. Decarboxylation of IV by fusion gave 7-carboxycoumarin (VI) and treatment of V with Me<sub>2</sub>SO<sub>4</sub> in alkaline medium produced 2-methoxy-4-carboxycinnamic acid. The synthesis of the various intermediates and products in the study was completed by the Knoevenagel reaction. Thus, 1.5 g. I is added to di-Et malonate containing 6 drops of piperidine to give V. A solution of 1 g. I in 10 ml. EtOH is treated with Et cyanoacetate and 2 drops of piperidine to give V, m. 223-226°. A suspension of 1.16 g. I in 3.5 ml. absolute EtOH is treated with 0.73 g. II and 0.6 ml. PhNH<sub>2</sub> to give IV. Similarly, a solution of 2.11 g. cyanoacetic acid in 25 ml. N NaOH is treated with 1.25 g. PhNH<sub>2</sub>.HCl, 20 ml. EtOH, and I to give IV. V (0.15 g.) after boiling for 1 hr. in 10 ml. 10% NaOH solution followed by cooling and acidification with 4 ml. 6N HCl also gives IV, m. 325-7°. To a suspension of 1.66 g. I in 15 ml. EtOH is added 0.99 g. malononitrile and 2 drops of piperidine and the mixture heated and acidified with 0.1N HCl to give 3-cyano-7-carboxycoumarin, m. 273-5°. Heating 0.5 g. I for 3 hrs. with 10 g. Ac<sub>2</sub>O and 2 g. NaOAc gives VI, m. 278-80°; Et ester m. 105-6°. VI can also be prepared by heating either IV or V (1.1 g.) for about 45 min. at 150-160° with PhNH<sub>2</sub>.HCl. VI (0.92 g.) can be converted to 2-methoxy-4-carboxycinnamic acid, m. 260-1°, by heating for 15 min. with 10 ml. Me<sub>2</sub>SO<sub>4</sub>, 50 ml. 20% KOH, and 150 ml. acetone. The reaction of 1.2 g. I Et ester with 1.25 g. malonic acid in 3 ml. EtOH containing 0.2 ml. PhNH<sub>2</sub> gave 3-carboxy-7-carbethoxycoumarin, m. 185°; 3-cyano-7-carbethoxycoumarin, m. 151-2°, was prepared by reaction of the I Et ester with malononitrile in EtOH containing piperidine. A solution of 3-carbethoxy-7-coumarin (0.5 g.) and III in 25 ml. EtOH containing 1 ml. concentrated H<sub>2</sub>SO<sub>4</sub> gave 3,7-dicarbethoxycoumarin, m. 118°. Anal. data including elemental anal., paper chromatog., ir and uv spectra, and N.M.R. absorption confirm the structure and identification of the various products.

IT 17397-77-2P

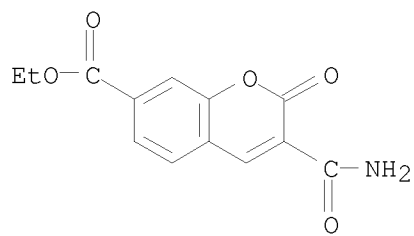
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 17397-77-2 CAPLUS

CN 2H-1-Benzopyran-7-carboxylic acid, 3-(aminocarbonyl)-2-oxo-, ethyl ester

10/513699

(CA INDEX NAME)



<12/04/2007>

Erich Leese

L9 ANSWER 314 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1967:503951 CAPLUS  
 DOCUMENT NUMBER: 67:103951  
 ORIGINAL REFERENCE NO.: 67:19587a,19590a  
 TITLE: Photoconductive coumarin derivatives for  
 electrophotographic reproductions  
 INVENTOR(S): Sgarbi, Renato; Chiodoni, Ugo; Knirsch, Franco  
 PATENT ASSIGNEE(S): Ferrania Societa per Azioni  
 SOURCE: Fr., 4 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

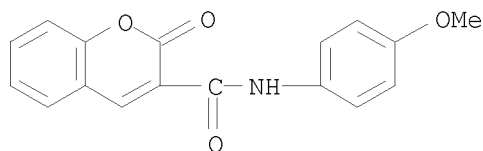
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1470053		19670217	FR 1966-51057	19660225 <--
GB 1129327			GB	
PRIORITY APPLN. INFO.:			IT	19650227

AB The title compds. have the general structure I where X and Y are H or halogen and R is OH, Ph, alkoxy, alkoyl, amino, alkoylamino, dialkoylamino, arylamino, arylalkoylamino, diarylamino, aralkoylamino, diaralkoylamino, polyethylene amino, or heterocyclic amino radical, or II where X and Y are H or halogen and R is -(CH<sub>2</sub>)<sub>2</sub>- or m-phenylene. A solution or dispersion of I or II in an organic solvent is mixed (1-2:1) with a polymer binder such as poly(vinyl alc.), poly(vinyl acetal), silicone resin, poly (acrylic acid), gelatin, methylcellulose, poly(vinyl acetate), optionally containing 30% by weight (based on I or II) plasticizer such as n-octyl adipate, 2-ethylhexyl adipate, triphenyl phosphate, dibutyl phthalate and coated (2-10 μ thickness) on a glass or metal plate such as Cu, Fe, Pb, Zn, Al, etc., to produce the electrophotographic materials. For example, 0.5 g. 6,8-dibromocarbethoxy-coumarin (Knoevenagel Ber., 31, 2585, (1898) was dissolved together with 26M (phenol-modified resin, B.A.S.F.) in 5 ml. dioxane. After centrifuging, the obtained solution was coated on an Al foil and the foil charged (5000 v.) after vaporization of the solvent, exposed to uv radiation through an original positive, and the obtained latent image was developed and fixed in a known manner.

IT 1846-94-2 1847-03-6 4021-23-2  
 17387-09-6 17602-55-0  
 RL: USES (Uses)  
 (as photoconductor for electrophotography)

RN 1846-94-2 CAPLUS

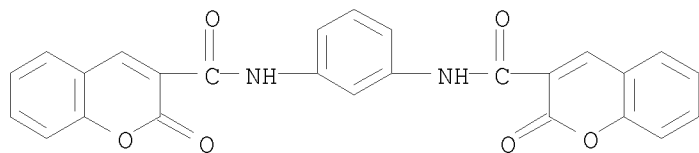
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 1847-03-6 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,3-phenylenebis[2-oxo- (CA INDEX NAME)

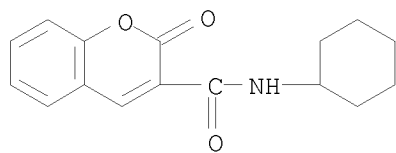


10/513699



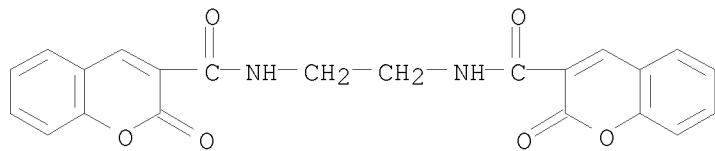
RN 4021-23-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-cyclohexyl-2-oxo- (CA INDEX NAME)



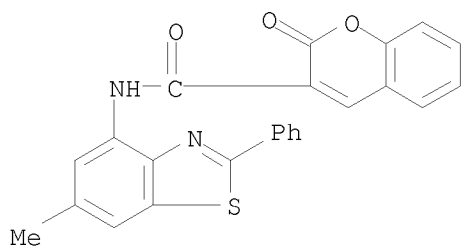
RN 17387-09-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,2-ethanediylbis[2-oxo- (CA INDEX NAME)



RN 17602-55-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(6-methyl-2-phenyl-4-benzothiazolyl)-2-oxo- (CA INDEX NAME)



L9 ANSWER 315 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1967:463988 CAPLUS

DOCUMENT NUMBER: 67:63988

ORIGINAL REFERENCE NO.: 67:12007a,12010a

TITLE: Malon-m-anisidic acid and some of its derivatives

AUTHOR(S): Singhal, O. P.; Ittyerah, P. I.

CORPORATE SOURCE: St. John's Coll., Agra, India

SOURCE: Journal of the Indian Chemical Society (1967

), 44(5), 448-9

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

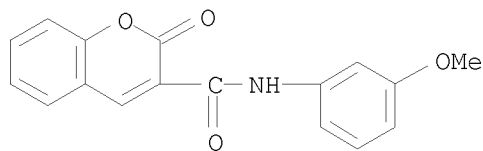
AB Et malonate (24 g.) was treated with 12.3 g. m-anisidine to give 6.3 g. malon-m-anisidic acid (I), m. 96°. Also obtained were malon-bis(m-methoxyanilide), m. 150°, Et malon-m-anisidate, and I hydrazide, m. 130°. I (1 g.) reacted with PhCHO to give benzylidenemalon-m-anisidic acid, m. 177°, and, when pyridine was used as a condensing agent, cinnam-m-anisidide, m. 124°. Heating 1 g. I and 0.58 g. salicylaldehyde in the presence of a trace of pyridine at 105° for 4 hr. gave 0.38 g. coumarin-3-carboxy-m-aniside, m. 188°. I hydrazide was treated with PhCHO to give the corresponding hydrazone, m. 190°. I was treated with other aldehydes to give the corresponding hydrazone (aldehyde and hydrazone m.p. given): o-MeOC<sub>6</sub>H<sub>4</sub>CHO, 162°; p-ClC<sub>6</sub>H<sub>4</sub>CHO, 222°; o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO, 183°; salicylaldehyde, 199°; 5-chlorosalicylaldehyde, 184°; 2-thiophenecarboxaldehyde, 158°; furfuraldehyde, 166°; acetophenone, 176°.

IT 15116-42-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 15116-42-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-methoxyphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 4

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L9 ANSWER 316 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1966:473302 CAPLUS

DOCUMENT NUMBER: 65:73302

ORIGINAL REFERENCE NO.: 65:13642c-h

TITLE: Coumarin-3,6-dicarboxylic acids and their derivatives

AUTHOR(S): Cingolani, Enrico; Cancelliere, Anna; Sordi, Adriana

CORPORATE SOURCE: Ist. super. Sanita, Rome

SOURCE: Annali di Chimica (Rome, Italy) (1966),

56(6), 700-16

CODEN: ANCRAI; ISSN: 0003-4592

DOCUMENT TYPE: Journal

LANGUAGE: Italian

AB cf. CA 63, 8250e, 8302h. A solution of 1.5 g. 3-formyl-4-hydroxybenzoic acid (I), 6 g.  $\text{CH}_2(\text{CO}_2\text{Et})_2$  and 6 drops piperidine, refluxed 1 hr., then kept 4 hrs. at  $40^\circ$  gave II ( $\text{R} = \text{OH}$ ,  $\text{R}' = \text{CO}_2\text{-Et}$ ) (III), m.  $276-9^\circ$ , also obtained by refluxing a mixture of equimolar amts. of I and  $\text{NCCHCO}_2\text{Et}$  in EtOH in the presence of traces of piperidine 1 min., then keeping 15 hrs. at room temperature. The following methods were employed to obtain II ( $\text{R} = \text{OH}$ ,  $\text{R}' = \text{CO}_2\text{H}$ ) (IV), m.  $272-4^\circ$ : a) a mixture of 0.01 mole I, 0.01 mole  $\text{CH}_2(\text{CO}_2\text{H})_2$ , 1.2 ml.  $\text{PhNH}_2$  and 15 ml. EtOH at  $60^\circ$  was allowed to cool to room temperature; after 1 day 10 ml.  $\text{H}_2\text{O}$  and 2 ml. concentrated HCl

was

added, and the mixture heated on a steam bath; b) To a hot solution of 3 g.  $\text{CH}_2(\text{CO}_2\text{H})_2$  in 7 ml.  $\text{C}_5\text{H}_5\text{N}$  and 3 drops  $\text{PhNH}_2$  was added 2.3 g. I, the mixture heated 3 hrs. at  $40^\circ$ , kept 1 day at room temperature, and treated with 10 ml.  $\text{H}_2\text{O}$  and 4 ml. concentrated HCl; c) To 0.9 g.  $\text{NCCH}_2\text{CO}_2\text{H}$  in 40 ml. 10% NaOH, 0.5 g.  $\text{PhNH}_2\cdot\text{HCl}$ , 1.7 g. I, and 4 ml. EtOH was added; the solution heated 5 min. on a steam bath, after 2 hrs. acidified with HCl, filtered, and the residue acidified in boiling  $\text{H}_2\text{O}$ ; d) A solution of 0.3 g. III in 15 ml. 10% NaOH was heated 2 hrs. at  $90^\circ$ , cooled, and acidified with HCl. A mixture of 1 g. I, 20 ml.  $\text{Ac}_2\text{O}$ , and 4 g. anhydrous  $\text{AcONa}$  was refluxed 5 hrs., poured into  $\text{H}_2\text{O}$  and acidified gave the known II ( $\text{R} = \text{OH}$ ,  $\text{R}' = \text{H}$ ) (V), m.  $268-71^\circ$ , which also was obtained by heating 0.25 g. IV and 3 g.  $\text{C}_5\text{H}_5\text{N}\cdot\text{HCl}$  0.5 hrs. at  $170^\circ$ . V refluxed 1 hr. with  $\text{SOCl}_2$  and the acid chloride treated on cooling with concentrated  $\text{NH}_4\text{OH}$  gave II ( $\text{R} = \text{NH}_2$ ,  $\text{R}' = \text{H}$ ), m.  $250-1^\circ$ . A solution 1.6 g. of the Et ester of I (VI) in 3.5 ml. EtOH, treated with 0.8 ml.  $\text{PhNH}_2$  and 1.2 g.  $\text{CH}_2(\text{CO}_2\text{H})_2$ , the mixture kept 1 day, the yellow precipitate treated with 10 ml. 6N HCl, filtered and after 1

day

and crystallized from EtOH yielded II ( $\text{R} = \text{EtO}$ ,  $\text{R}' = \text{CO}_2\text{H}$ ) (VII), m.  $243-5^\circ$ , which was alternately obtained by adding 0.7 ml. piperidine to a hot solution of 0.8 g. VI and 0.4 g.  $\text{NCCH}_2\text{CO}_2\text{H}$  in 20 ml. EtOH, keeping the mixture 1 day at room temperature and acidifying. VII refluxed 0.5 hr.

with

$\text{SOCl}_2$  and the corresponding acid chloride, m.  $155-6^\circ$ , treated with concentrated  $\text{NH}_4\text{OH}$ , gave II ( $\text{R} = \text{EtO}$ ,  $\text{R}' = \text{CONH}_2$ ), m.  $262-5^\circ$  (dioxane- $\text{H}_2\text{O}$ ). To a solution of 0.8 g. VI in 5 ml. EtOH, 0.6 g.  $\text{NCCH}_2\text{CO}_2\text{Et}$  and 2 drops piperidine was added and the mixture refluxed 1 min. and kept 15 hrs. at room temperature to precipitate II ( $\text{R} = \text{EtO}$ ;  $\text{R}' = \text{CO}_2\text{Et}$ ), m.  $135^\circ$ , which was also obtained by refluxing 3 hrs. a solution of VII in EtOH in the presence of concentrated  $\text{H}_2\text{SO}_4$ . A solution of 1 g. VI, 0.5 g.  $\text{CH}_2(\text{CN})_2$ , 2

drops

piperidine, and 5 ml. EtOH, kept 15 hrs. at room temperature precipitated II

( $\text{R} = \text{EtO}$ ,

$\text{R}' = \text{CN}$ ), m.  $156^\circ$  (dilute EtOH), which refluxed with 4N HCl gave II

( $\text{R} = \text{OH}$ ,  $\text{R}' = \text{CN}$ ), m.  $232-5^\circ$  (dioxane- $\text{H}_2\text{O}$ . This product was also

obtained from a mixture of 1 g. I, 0.55 g.  $\text{CH}_2(\text{CN})_2$ , 2 drops piperidine and

10/513699

5 ml. EtOH, heated until solution, kept 14 hrs. at room temperature, and the precipitate

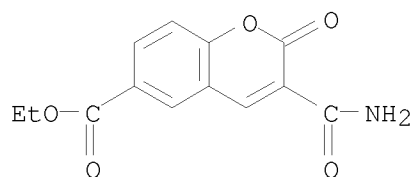
refluxed in 50 ml. 6N HCl until solution The uv and ir spectra of II are reported.

IT 7734-84-1P, 2H-1-Benzopyran-6-carboxylic acid,  
3-carbamoyl-2-oxo-, ethyl ester

RL: PREP (Preparation)  
(preparation of)

RN 7734-84-1 CAPLUS

CN 2H-1-Benzopyran-6-carboxylic acid, 3-(aminocarbonyl)-2-oxo-, ethyl ester  
(CA INDEX NAME)



L9 ANSWER 317 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1966:51726 CAPLUS

DOCUMENT NUMBER: 64:51726

ORIGINAL REFERENCE NO.: 64:9623d-e

TITLE: Malon-o-anisidic acid and some of its derivatives

AUTHOR(S): Singhal, O. P.; Ittyerah, P. I.

CORPORATE SOURCE: St. John's College, Agra

SOURCE: Journal of the Indian Chemical Society (1965), 42(11), 802-4

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Malon-o-anisidic acid (I), its ethyl ester, amide, and hydrazide (II) were prepared. Malondi-o-anisidide was obtained as a by-product. I was condensed with benzaldehyde to yield benzylidenemalon-o-anisidic acid and cinnam-o-anisidide, with 2-thiophenecarboxaldehyde to yield 2-thenalmalon-o-anisidic acid, 2-thienylacryl-o-anisidide and with salicylaldehyde to yield coumarin-3-carbox-o-anisidide in presence of different condensing agents. From II, the hydrazones of benzaldehyde, o-chloro-, o-nitro-, and o-methoxybenzaldehydes, salicylaldehyde, 5-chloro- and 5-bromosalicylaldehydes, 2-thiophenecarboxaldehyde, furfural, chloral, acetone, ethyl methyl ketone, acetophenone, and benzophenone were prepared.

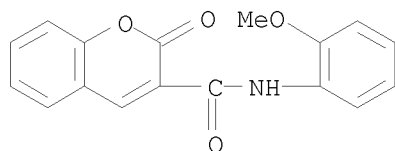
IT 3949-39-1P, Coumarin, 3-[(o-methoxyphenyl)carbamoyl]-

RL: PREP (Preparation)

(preparation of)

RN 3949-39-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-methoxyphenyl)-2-oxo- (CA INDEX NAME)



L9 ANSWER 318 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1966:19099 CAPLUS

DOCUMENT NUMBER: 64:19099

ORIGINAL REFERENCE NO.: 64:3462f-h

TITLE: Some coumarins from malono-2,5-xylic acid and substituted salicylaldehydes

AUTHOR(S): Bhukta, M. J.; Ittyerah, P. I.

CORPORATE SOURCE: St. John's Coll., Agra

SOURCE: Journal of the Indian Chemical Society (1965), 42(7), 454-6

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Malono-2,5-xylic acid and a mono- or disubstituted salicylaldehyde are heated on a steambath for 4 hrs. either in the absence of any condensing agent or in the presence of a trace of pyridine, piperidine, or glacial AcOH. The product is a mixture of the coumarin (I) and the Schiff base (II). Yields for I (generally yellow or orange) are 25-60%; for II (orange to scarlet red) 25-40%. Separation is through crystallization from alc. in

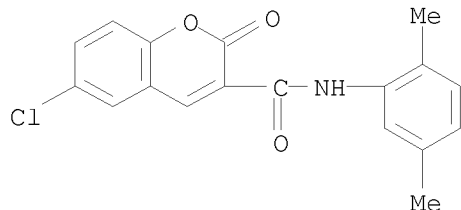
which I are not soluble. Melting points for I are 212° (6-Cl), 215° (6-Br), 173° (6-NO<sub>2</sub>), 162° (6,8-di-Cl), 160° (6,8-di-Br), 150° (6,8-di-I), 190° (6,8-di-NO<sub>2</sub>), and 155° (6-Cl-8-NO<sub>2</sub>); and for II 85° (5-Cl), 68° (5-Br), 184° (5-NO<sub>2</sub>), 119° (3,5-di-Cl), 150° (3,5-di-Br), 165° (3,5-di-I), 212° (3,5-di-NO<sub>2</sub>), and 190° (5-Cl-3-NO<sub>2</sub>). Formation of the Schiff base occurs only in the condensation of salicylaldehydes and has not been observed with aromatic aldehydes lacking an OH group ortho to the CHO group.

IT 5188-54-5P, Coumarin, 6-chloro-3-(2,5-xylylcarbamoyl)-  
 5188-55-6P, Coumarin, 6-bromo-3-(2,5-xylylcarbamoyl)-  
 5188-56-7P, Coumarin, 6-nitro-3-(2,5-xylylcarbamoyl)-  
 5188-60-3P, Coumarin, 6,8-dinitro-3-(2,5-xylylcarbamoyl)-  
 5188-61-4P, Coumarin, 6-chloro-8-nitro-3-(2,5-xylylcarbamoyl)-  
 RL: PREP (Preparation)

(preparation of)

RN 5188-54-5 CAPLUS

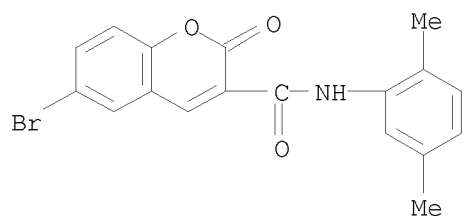
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(2,5-dimethylphenyl)-2-oxo- (CA INDEX NAME)



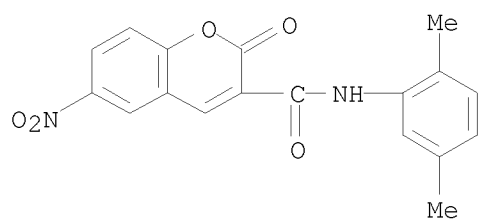
RN 5188-55-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2,5-dimethylphenyl)-2-oxo- (CA INDEX NAME)

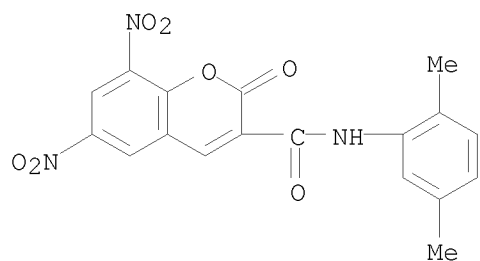
10/513699



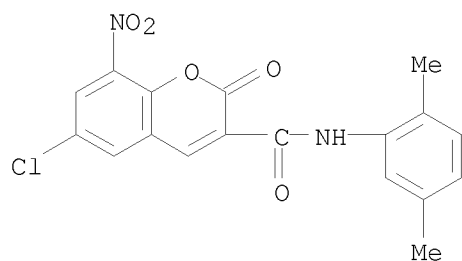
RN 5188-56-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2,5-dimethylphenyl)-6-nitro-2-oxo- (CA INDEX NAME)



RN 5188-60-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2,5-dimethylphenyl)-6,8-dinitro-2-oxo- (CA INDEX NAME)



RN 5188-61-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(2,5-dimethylphenyl)-8-nitro-2-oxo- (CA INDEX NAME)



10/513699

<12/04/2007>

Erich Leese



L9 ANSWER 319 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1966:11370 CAPLUS

DOCUMENT NUMBER: 64:11370

ORIGINAL REFERENCE NO.: 64:2045c-e

TITLE: Some new coumarins: condensation of  
malono-p-pheneticidic acid with salicylaldehyde and  
substituted salicylaldehydes

AUTHOR(S): Singhal, O. P.; Ittyerah, P. I.

CORPORATE SOURCE: St. John's Coll., Agra

SOURCE: Journal of the Indian Chemical Society (1965  
, 42(9), 616-18

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB A mixture of 0.56 g. o-HOC<sub>6</sub>H<sub>4</sub>CHO, 1.1 g. p-EtOC<sub>6</sub>H<sub>4</sub>NHCOCH<sub>2</sub>CO<sub>2</sub>H, and a  
drop of pyridine was heated 10 hrs. at 100-5°, the solid mass  
digested with 10 ml. saturated aqueous NaHCO<sub>3</sub>, the solid washed with H<sub>2</sub>O, and  
boiled with 15 ml. EtOH. Concentration of the EtOH extract gave 2% I (R<sub>1</sub> = R<sub>2</sub>  
= H),

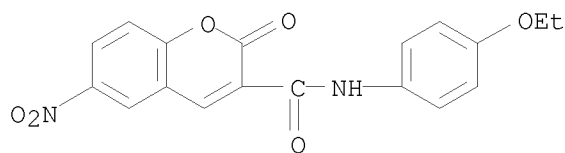
m. 95°. Crystallization of the EtOH-insol. material yielded 48% II (R<sub>1</sub> =  
R<sub>2</sub> = H), m. 210-11°. Similarly were prepared (R<sub>1</sub>, R<sub>2</sub>, m.p. I, and  
m.p. II given): Cl, H, 144°, 218°; Cl, Cl, 132°,  
235°; Br, H, 150°, 210°; Br, Br, 152°,  
214°; I, I, 138°, 251°; NO<sub>2</sub>, H, 173°,  
243°; NO<sub>2</sub>, NO<sub>2</sub>, 242°, >300°; Cl, NO<sub>2</sub>, 153°,  
273°.

IT 4487-68-7P, Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]-6-nitro-  
4487-70-1P, Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]-6,8-dinitro-  
4517-89-9P, Coumarin, 6-chloro-3-[(p-ethoxyphenyl)carbamoyl]-  
4517-91-3P, Coumarin, 6-bromo-3-[(p-ethoxyphenyl)carbamoyl]-  
4652-61-3P, Coumarin, 6-chloro-3-[(p-ethoxyphenyl)carbamoyl]-8-  
nitro-

RL: PREP (Preparation)  
(preparation of)

RN 4487-68-7 CAPLUS

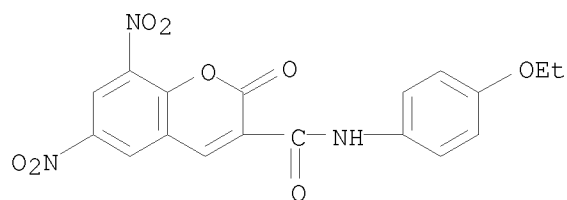
CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-6-nitro-2-oxo- (CA  
INDEX NAME)



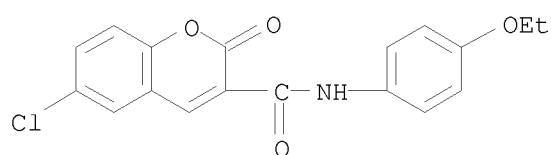
RN 4487-70-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-6,8-dinitro-2-oxo- (CA  
INDEX NAME)

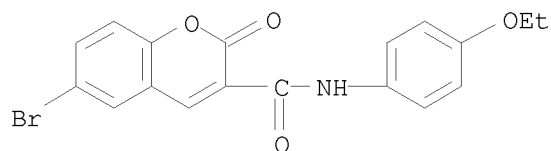
10/513699



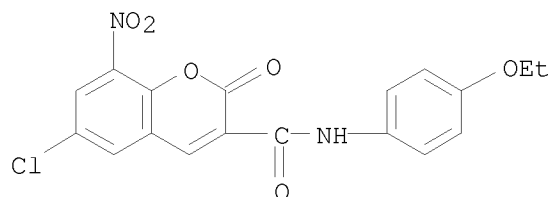
RN 4517-89-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 4517-91-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 4652-61-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(4-ethoxyphenyl)-8-nitro-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

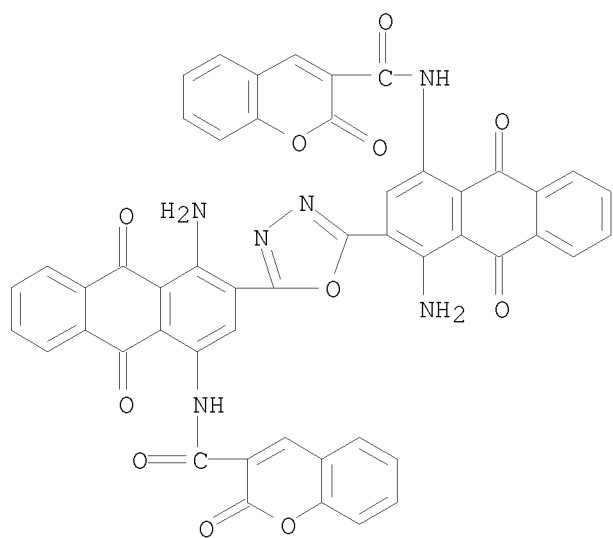
L9 ANSWER 320 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:481165 CAPLUS  
 DOCUMENT NUMBER: 63:81165  
 ORIGINAL REFERENCE NO.: 63:15024g-h,15025a-b  
 TITLE: 2,5-Bis(2-anthraquinonyl)-1,3,4-oxadiazole dyes  
 PATENT ASSIGNEE(S): CIBA Ltd.  
 SOURCE: 25 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 650257		19650108	BE	
FR 1404010			FR	
GB 1006157			GB	
PRIORITY APPLN. INFO.:			CH	19630709

GI For diagram(s), see printed CA Issue.  
 AB Comps. of the general formulas I and II give fast blue dyeings on cellulose fibers (III). Thus, a mixture of 2.8 parts thiophene-2-carboxylic acid, 150 parts PhNO<sub>2</sub>, and 7.1 parts SOCl<sub>2</sub> is agitated 1 h. at 100-10°, the excess SOCl<sub>2</sub> and PhNO<sub>2</sub> are distilled, 5.4 parts 2,5-bis(1,4-diamino-2-anthraquinonyl)-1,3,4-oxadiazole is added at 100° and the mixture is heated 2 h. at 140-5°, heated 3 h. at 160-5°, and filtered at 120° to give I (Ar = 2-thienyl), blue on III. Similarly prepared are the following I (Ar and color on III given): 2-furyl, reddish blue; 2-quinolyl, reddish blue; 2-pyridyl, reddish blue; 1-phenyl, 1,2,3-triazol-4-yl, reddish blue; 5-phenyl-2-thienyl, greenish blue; 2-phenyl-5-thiazolyl, blue; 2-phenyl-4-quinolyl, blue; 3-coumarinyl, greenish blue; 2-benzofuranyl, blue; 2,4,6-trichloro-3-pyridyl, violet; 5-(2-furyl)-2-thienyl, greenish blue; 5-(5-phenyl-1,3,4-oxadiazol-2-yl)-2-thienyl, greenish blue; A, blue. Also prepared are the following II (Ar, Ar', and color on III given): Ph, 2-furyl, blue; Ph, 5-carbomethoxy-2-thienyl, greenish blue; 2-furyl, 5-carboxy-2-thienyl (Na salt), greenish blue.  
 IT 4375-75-1P, Coumarin, 3,3'-[1,3,4-oxadiazole-2,5-diylbis[(4-amino-3,1-anthraquinonylene)iminocarbonyl]]di-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 4375-75-1 CAPLUS  
 CN Coumarin, 3,3'-[1,3,4-oxadiazole-2,5-diylbis[(4-amino-3,1-anthraquinonylene)iminocarbonyl]]di- (7CI, 8CI) (CA INDEX NAME)

10/513699



<12/04/2007>

Erich Leese

L9 ANSWER 321 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:462887 CAPLUS

DOCUMENT NUMBER: 63:62887

ORIGINAL REFERENCE NO.: 63:11481f-h,11482a-b

TITLE: Some new 2-iminocoumarin and coumarin derivatives with antimicrobial activity

AUTHOR(S): Selleri, R.; Caldini, O.; Ferretti, G. F.

CORPORATE SOURCE: Soc. Ital.-Britannica L. Manetti, H. Roberts Co., Florence

SOURCE: Bollettino Chimico Farmaceutico (1965), 104(4), 248-53

CODEN: BCFAAI; ISSN: 0006-6648

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

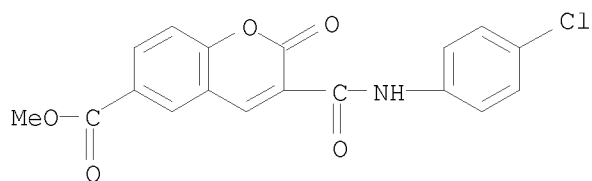
AB I are prepared by the following methods. (1) The appropriate alkyl 3-formyl-4-hydroxybenzoate (0.03 mole) was treated with 0.03 mole cyanoacetanilide in the presence of piperidine. (2) Alkyl (0.03 mole) 3-formyl-4-hydroxybenzoate was treated with 0.03 mole of the appropriately ring-substituted anilide of cyanoacetic acid in the presence of piperidine. (3) Alkyl 3-formyl-4-hydroxybenzoate (0.03 mole) was treated with 0.03 mole of the appropriate ring-disubstituted anilide of cyanoacetic acid in the presence of piperidine. (4) The imino compds. were refluxed with 5N HCl to give the corresponding ketones. Thus were prepared the following I (R', R'', X, and m.p. given): Me, NH, H, 208-9°; Me, NH, o-Cl, 224-5°; Me, NH, m-Cl, 214-15°; Me, NH, p-Cl, 216-18°; Me, NH, 2,4-Cl<sub>2</sub>, 250°; Me, NH, 2,3-Cl<sub>2</sub>, 243-4°; Me, NH, 2,5-Cl<sub>2</sub>, 246°; Me, NH, 3,4-Cl<sub>2</sub>, 235°; Me, NH, m-NO<sub>2</sub>, 243-5°; Me, NH, p-NO<sub>2</sub>, 253°; Et, NH, H, 180-1°; Et, NH, o-Cl, 220-2°; Et, NH, m-Cl, 182°; Et, NH, p-Cl, 236-8°; Et, NH, 2,3-Cl<sub>2</sub>, 225-6°; Et, NH, 2,4-Cl<sub>2</sub>, 243-4°; Et, NH, 2,5-Cl<sub>2</sub>, 242-3°; Et, NH, 3,4-Cl<sub>2</sub>, 210-12°; Et, NH, m-NO<sub>2</sub>, 228-30°; Et, NH, p-NO<sub>2</sub>, 252-5°; Me, NH, o-Br, 218-20°; Me, NH, m-Br, 220-1°; Me, NH, p-Br, 224-6°; Et, NH, o-Br, 220-2°; Et, NH, m-Br, 187-90°; Et, NH, p-Br, 235-8°; Me, O, o-Cl, 240-1°; Me, O, m-Cl, 229-30°; Me, O, p-Cl, 251-3°; Me, O, m-NO<sub>2</sub>, 281-3°; Et, O, m-Cl, 230-1°; Et, O, p-Cl, 247-8°; Et, O, 2,4-Cl<sub>2</sub>, 273-4°. The antimicrobial action of these compds. was determined against Staphylococcus aureus, Escherichia coli, Tricophyton mentagrophytes, and Penicillium. All the compds. were inactive against the Penicillium, whereas some compds. had activity against the other microorganisms.

IT 3280-75-9P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(p-chlorophenyl)carbamoyl]-2-oxo-, methyl ester 3280-76-0P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(m-chlorophenyl)carbamoyl]-2-oxo-, methyl ester 3287-37-4P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(p-chlorophenyl)carbamoyl]-2-oxo-, ethyl ester 3287-38-5P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(m-chlorophenyl)carbamoyl]-2-oxo-, ethyl ester 3551-00-6P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(m-nitrophenyl)carbamoyl]-2-oxo-, methyl ester 3770-93-2P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(o-chlorophenyl)carbamoyl]-2-oxo-, methyl ester 4805-80-5P, 2H-1-Benzopyran-6-carboxylic acid, 3-[(2,4-dichlorophenyl)carbamoyl]-2-oxo-, ethyl ester  
RL: PREP (Preparation)  
(preparation of)

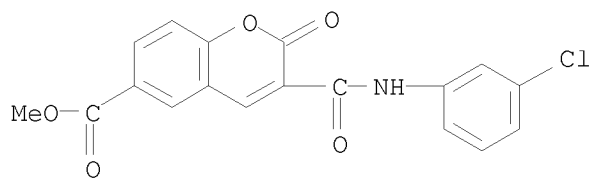
RN 3280-75-9 CAPLUS

10/513699

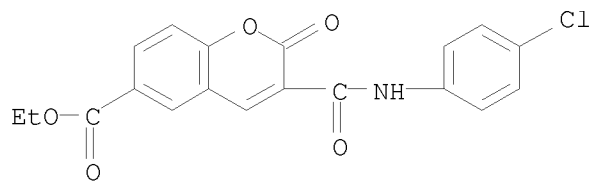
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (4-chlorophenyl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)



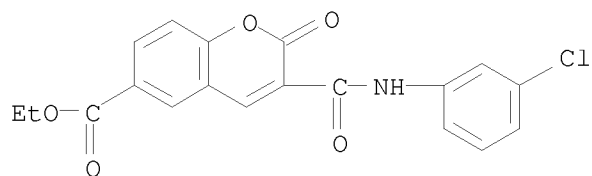
RN 3280-76-0 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (3-chlorophenyl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)



RN 3287-37-4 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (4-chlorophenyl)amino]carbonyl]-2-oxo-, ethyl ester (CA INDEX NAME)

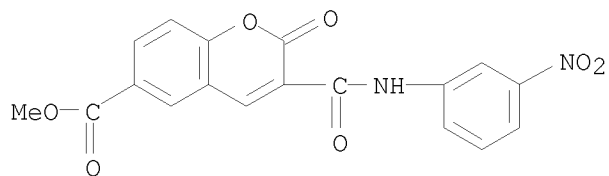


RN 3287-38-5 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (3-chlorophenyl)amino]carbonyl]-2-oxo-, ethyl ester (CA INDEX NAME)

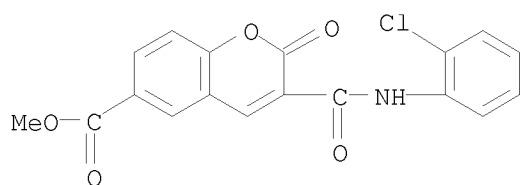


RN 3551-00-6 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[ (3-nitrophenyl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)

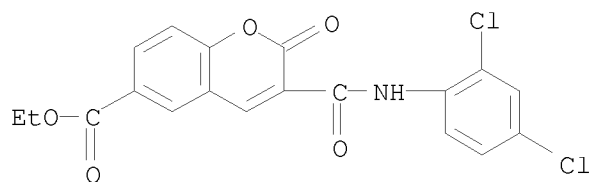
10/513699



RN 3770-93-2 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[2-(4-nitrophenyl)amino]carbonyl]-2-oxo-, methyl ester (CA INDEX NAME)



RN 4805-80-5 CAPLUS  
CN 2H-1-Benzopyran-6-carboxylic acid,  
3-[[2-(2,4-dichlorophenyl)amino]carbonyl]-2-oxo-, ethyl ester (CA INDEX NAME)



L9 ANSWER 322 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:424096 CAPLUS

DOCUMENT NUMBER: 63:24096

ORIGINAL REFERENCE NO.: 63:4274f-h, 4275a-d

TITLE: Seven-membered ring compounds. XIII. Reaction of 2-bromo-7-methoxytropone with active methylene compounds

AUTHOR(S): Sunagawa, Genshun; Nakao, Hideo

CORPORATE SOURCE: Sankyo Co., Ltd., Tokyo

SOURCE: Chemical &amp; Pharmaceutical Bulletin (1965), 13(4), 443-50

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 63:24096

GI For diagram(s), see printed CA Issue.

AB cf. CA 62, 7678g. Na (230 mg.) and 840 mg. NCCH<sub>2</sub>CONH<sub>2</sub> (I) in 50 cc. EtOH kept 2 hrs. at room temperature with 1.1 g. 2-bromo-7-methoxytropone (II) in 10 cc. EtOH gave 0.9 g. orange-red 2,3-NaO(MeO)C<sub>6</sub>H<sub>3</sub>CH:C(CN)CONH<sub>2</sub> (III), m. above 280°. I (840 mg.) and 230 mg. Na in 50 cc. EtOH refluxed 0.5 hr. with 1.52 g. 2,3-HO(MeO)C<sub>6</sub>H<sub>3</sub>CHO (IV) gave 2.0 g. III. III (1 g.) in 20 cc. H<sub>2</sub>O neutralized with 10% HCl yielded 0.5 g. 2-imino-8-methoxy-2H-1-benzopyran-3-carboxamide (V), m. 195° (EtOH). V (300 mg.) and 10 cc. 10% HCl heated 1 hr. on a steam bath gave 200 mg. 8-methoxy-3-coumarinocarboxamide (VI), pale yellow, m. 247° (EtOH). 8-Methoxy-3-coumarinocarboxylic acid (VII) (500 mg.) and 10 cc. concentrated HBr refluxed 5 hrs. yielded 300 mg. 8-hydroxy-3-coumarinocarboxylic acid (VIII), pale yellow, m. 305° (decomposition). V and VI gave similarly VIII. Na (460 mg.) and 2 g. NCCH<sub>2</sub>CONHMe in 25 cc. EtOH treated 2 hrs. at room temperature with 4.3 g. II in 30 cc. EtOH yielded 200 mg. N-Me derivative (IX) of VI, m. 184° (EtOH). Acid chloride (X) (200 mg.) of VII treated with cooling with 0.5 cc. 30% aqueous Me-NH<sub>2</sub> yielded 100 mg. IX, m. 184°. VII (500 mg.), 600 mg. PCl<sub>5</sub>, and 15 cc. C<sub>6</sub>H<sub>6</sub> refluxed 2 hrs. gave 400 mg. X, m. 171° (C<sub>6</sub>H<sub>6</sub>). II (500 mg.) stirred 3 hrs. at room temperature with 110 mg. Na and 750 mg. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> in 50 cc. Et<sub>2</sub>O and

kept overnight yielded 200 mg. Et ester (XI) of VII, m. 88° (C<sub>6</sub>H<sub>6</sub>-cyclohexane). IV (1.5 g.), 1.6 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub>, and 2 drops piperidine kept at room temperature overnight and then refluxed 3 hrs. with 50 cc. absolute EtOH gave XI, m. 85°. IV (1.5 g.), 2.1 g. p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CO<sub>2</sub>Et (XII), 3 drops piperidine, 1 drop AcOH, and 5 cc. EtOH refluxed 0.5 hr. gave 3-(p-nitrophenyl)-8-methoxycoumarin (XIII), pale yellow, m. above 280°. Na (215 mg.) and 2 g. XII in EtOH treated overnight with 2 g. II in 20 cc. EtOH gave XIII. Na (114 mg.) and 720 mg. BzCH<sub>2</sub>CN in 20 cc. EtOH with 350 mg. 2-chlorotropone (XIV) in 5 cc. EtOH gave similarly 150 mg. 2-amino-1-benzoyl-3-azulenecarbonitrile (XV), red-violet, m. 269° (EtOH). Na (70 mg.), 250 mg. AcCH<sub>2</sub>CN, and 210 mg. XIV gave the 1-Ac analog of XV, red-violet m. 271° (decomposition). Na (230 mg.) and 660 mg. CH<sub>2</sub>(CN)<sub>2</sub> in 35 cc. EtOH treated 2 hrs. at room temperature with 1.1 g. II in 10 cc. EtOH gave 0.9 g. Na salt (XVI) of 7-bromo-1-hydroxy-8,8-heptafulvenedicarbonitrile, orange-red, m. above 280°. XVI (0.9 g.) in 20 cc. H<sub>2</sub>O treated with C and neutralized with 10% HCl gave 0.6 g. XVII, m. 120° (decomposition). XVII (1.5 g.) in 30 cc. 8% HBr heated 5 hrs. on a steam bath yielded 0.5 g. 8-Br derivative (XVIII) of 2-oxo-2H-cyclohepta[b]furan-3-carboxamide (XIX), brown needles, m. 270°. XVII (200 mg.) and 5 cc. 1% HCl heated 8 hrs. on a steam bath gave 150 mg. XIX, yellow, m. 274° (decomposition) (EtOH). XVIII



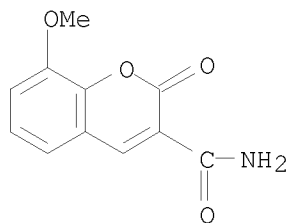
10/513699

(200 mg.) in 60 cc. AcOH hydrogenated over 100 mg. 5% Pd-C gave XIX. Na (176 mg.) and 1 g. H<sub>2</sub>NCOCH<sub>2</sub>CO<sub>2</sub>Et in 50 cc. Et<sub>2</sub>O stirred 3 hrs. at room temperature with 540 mg. XIV and kept overnight yielded 0.6 g. XIX. Na (46 mg.) and 132 mg. CH<sub>2</sub>(CN)<sub>2</sub> in 30 cc. EtOH treated 4 hrs. at room temperature with 294 mg. 5,7-dibromo-2-methoxytropone in 15 cc. EtOH, and the crude product heated 1.5 hrs. on a steam bath with 10 cc. 10% HBr gave 100 mg. 6,8-dibromo derivative of XIX, m. 224° (decomposition) (EtOH). The uv spectra of III, V, and VIII are recorded.

IT 1728-88-7P, Coumarin, 3-carbamoyl-8-methoxy-  
1769-87-5P, Coumarin, 8-methoxy-3-(methylcarbamoyl)-  
RL: PREP (Preparation)  
(preparation of)

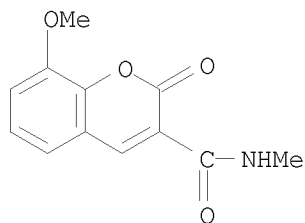
RN 1728-88-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo- (CA INDEX NAME)



RN 1769-87-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-N-methyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L9 ANSWER 323 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:41135 CAPLUS

DOCUMENT NUMBER: 62:41135

ORIGINAL REFERENCE NO.: 62:7251h,7252a

TITLE: Infrared absorption spectra of monochloro derivatives of alkylcyclohexanes

AUTHOR(S): Zelenskaya, L. G.; Mamedov, F. A.; Semina, G. N.

SOURCE: Azerbaidzhanskii Khimicheskii Zhurnal (1964

), (3), 103-10

CODEN: AZKZAU; ISSN: 0005-2531

DOCUMENT TYPE: Journal

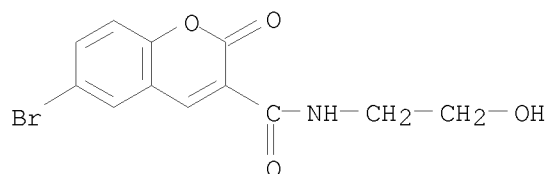
LANGUAGE: Unavailable

AB Absorption spectra of monochlorocyclohexane, 1-chloro-2-cyclohexylethane, trans-1-methyl-4-chloromethylcyclohexane, trans-1-methyl-2-chloromethylcyclohexane, 1-chloro-3-methylcyclohexane, 1-chloro-4-methylcyclohexane, 1-chloro-2-ethylcyclohexane, 1-chloro-4-ethylcyclohexane, 1-chloro-4-isopropylcyclohexane, 1-chloro-1-methylcyclohexane, and 1-chloro-1-ethylcyclohexane were determined, 400-4000 cm.<sup>-1</sup> Absorption frequencies were determined, characteristic frequencies of bands of the C-Cl valence vibrations were determined, and a preliminary evaluation of the intensity of these bands is stated. Some  $\nu$ C-Cl frequencies of the primary and secondary chlorocyclohexanes are equal to  $\nu$ C-Cl frequencies of the primary and secondary aliphatic chlorides. Other  $\nu$ C-Cl bands of the secondary and tertiary chlorides have different frequencies. Both frequency and intensity of the bands have equal values for various compds., and they can be used for structural-group analysis of monochloro derivs. of alkylcyclohexanes.

IT 2199-81-7, Coumarin, 6-bromo-3-[(2-hydroxyethyl)carbamoyl]-  
(spectrum of)

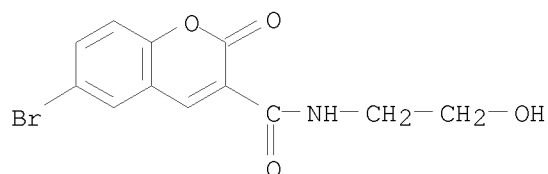
RN 2199-81-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-hydroxyethyl)-2-oxo- (CA  
INDEX NAME)



10/513699

L9 ANSWER 324 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1965:41134 CAPLUS  
DOCUMENT NUMBER: 62:41134  
ORIGINAL REFERENCE NO.: 62:7251g-h  
TITLE: Use of the influence coefficients in the calculation  
of molecular vibrations  
AUTHOR(S): Berezin, V. I.; Krainov, E. P.  
SOURCE: Optika i Spektroskopiya (1964), 17(6), 950-2  
CODEN: OPSPAM; ISSN: 0030-4034  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
AB A method is presented for calculating vibration spectra of poly- and  
heterocyclic organic compds. by using known influence coeffs. of a similar  
compound The method is exemplified by calculating the vibration spectrum of  
pyrazine by using the known influence coeffs. of pyridine.  
IT 2199-81-7, Coumarin, 6-bromo-3-[(2-hydroxyethyl)carbamoyl]-  
(spectrum of)  
RN 2199-81-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(2-hydroxyethyl)-2-oxo- (CA  
INDEX NAME)



L9 ANSWER 325 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:41131 CAPLUS

DOCUMENT NUMBER: 62:41131

ORIGINAL REFERENCE NO.: 62:7251b-d

TITLE: Infrared absorption spectra of the coordination compounds of Sn(IV) with aliphatic diamines

AUTHOR(S): Sakenova, D. S.; Sumarokova, T. N.; Usanovich, M. I.

SOURCE: Izvestiya Akademii Nauk Kazakhskoi SSR, Seriya

Khimicheskaya (1964), 14(3), 17-26

CODEN: IKAKAK; ISSN: 0002-3205

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

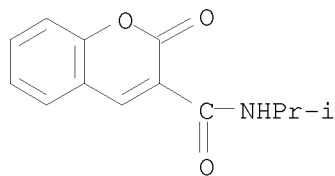
AB Ir spectra of the following Sn(IV) coordination compds. with aliphatic diamines, such as SnX42Z, SnX43Z, and SnX44Z (where X is Cl, Br, or I and Z is ethylene, tetramethylene, and hexamethylene diamines), were measured, 700-3500 cm.<sup>-1</sup> In the region of valence and deformation vibration of the N-H bond. all compds. have shifted bands at 3123-3270 cm.<sup>-1</sup> corresponding to the formation of a donor-acceptor bond NH . . .Sn. The bands at 2982-3216, 1535-1600, 1490-1508, 1013-1034, and 998-1007 cm.<sup>-1</sup> correspond to the valence and deformation vibrations,  $\nu_{N+H3}$ ,  $\delta_{N+H3}$ , and  $\rho_{N+H3}$ . The ir spectra of SnX43Z and SnX44Z compds. have, besides the mentioned bands those at 3304-3420 cm.<sup>-1</sup> located in the region of valence vibrations of the N-H bond of the free NH<sub>2</sub> group.

IT 1846-82-8 1847-04-7 101123-56-2

(Derived from data in the 7th Collective Formula Index (1962-1966))

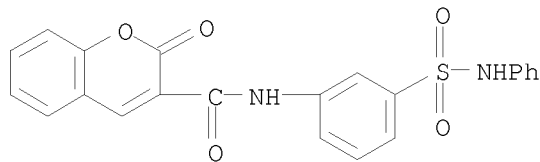
RN 1846-82-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(1-methylethyl)-2-oxo- (CA INDEX NAME)



RN 1847-04-7 CAPLUS

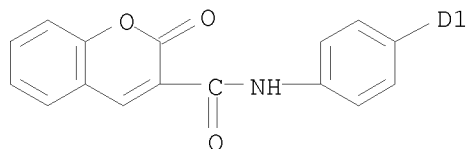
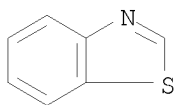
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[3-[(phenylamino)sulfonyl]phenyl]- (CA INDEX NAME)



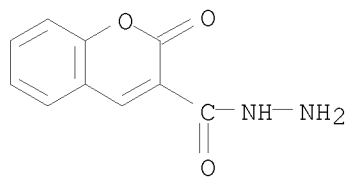
RN 101123-56-2 CAPLUS

CN Coumarin, 3-[(p-benzothiazolylphenyl)carbamoyl]- (7CI) (CA INDEX NAME)

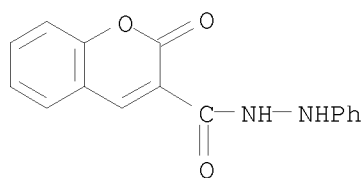
10/513699



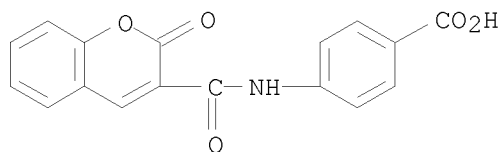
IT 1846-91-9, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide  
1846-92-0, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-phenylhydrazide 1847-05-8, Benzoic acid,  
p-(2-oxo-2H-1-benzopyran-3-carboxamido)-  
(spectrum of)  
RN 1846-91-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)



RN 1846-92-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX NAME)



RN 1847-05-8 CAPLUS  
CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl) carbonyl] amino]- (CA INDEX NAME)

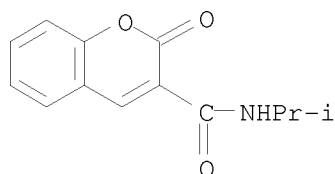


10/513699

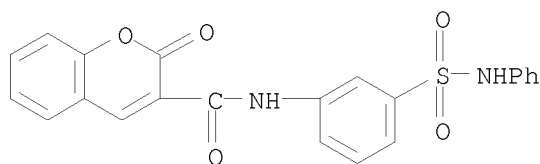
<12/04/2007>

Erich Leese

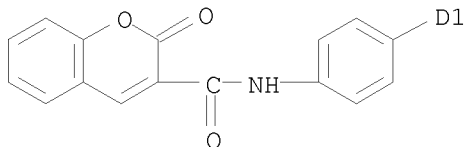
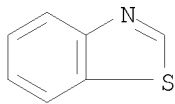
L9 ANSWER 326 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1965:41130 CAPLUS  
 DOCUMENT NUMBER: 62:41130  
 ORIGINAL REFERENCE NO.: 62:7251b  
 TITLE: Infrared spectra of certain 3-acylcoumarin derivatives  
 AUTHOR(S): Bassignana, P.; Cogrossi, C.  
 CORPORATE SOURCE: Lab. Rech. S.p.A., Ferrania, Italy  
 SOURCE: Tetrahedron (1964), 20(12), 2859-71  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 AB Ir spectra of 69 3-acyl coumarin derivs. are recorded and analyzed,  
 400-4000 cm.<sup>-1</sup> Band assignments are proposed. Some absorption bands are  
 characteristic for these coumarins, and can be used in recognizing and  
 differentiating a coumarin structure in an unknown compound  
 IT 1846-82-8 1847-04-7 101123-56-2  
 (Derived from data in the 7th Collective Formula Index (1962-1966))  
 RN 1846-82-8 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(1-methylethyl)-2-oxo- (CA INDEX NAME)



RN 1847-04-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[3-[(phenylamino)sulfonyl]phenyl]-  
 (CA INDEX NAME)



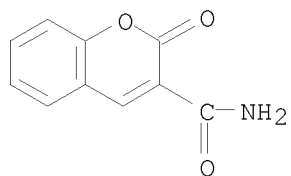
RN 101123-56-2 CAPLUS  
 CN Coumarin, 3-[(p-benzothiazolylphenyl)carbamoyl]- (7CI) (CA INDEX NAME)



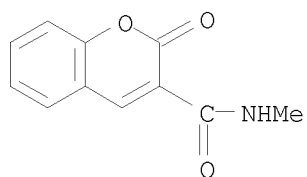
IT 1846-78-2, Coumarin, 3-carbamoyl- 1846-79-3,  
 Coumarin, 3-(methylcarbamoyl)- 1846-80-6, Coumarin,  
 3-(ethylcarbamoyl)- 1846-81-7, Coumarin, 3-(propylcarbamoyl)-  
 1846-83-9, Coumarin, 3-(butylcarbamoyl)- 1846-84-0,  
 Coumarin, 3-(isobutylcarbamoyl)- 1846-85-1, Coumarin,  
 3-(isopentylcarbamoyl)- 1846-86-2, Coumarin,  
 3-(hexylcarbamoyl)- 1846-87-3, Coumarin, 3-(octylcarbamoyl)-  
 1846-88-4, Coumarin, 3-(dodecylcarbamoyl)- 1846-90-8,  
 Coumarin, 3-(benzylcarbamoyl)- 1846-91-9,  
 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide 1846-92-0  
 , 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide  
 1846-93-1, Coumarin, 3-[[p-(diethylamino)phenyl]carbamoyl]-  
 1846-94-2, Coumarin, 3-[[p-methoxyphenyl]carbamoyl]-  
 1846-95-3, Coumarin, 3-[[o-hydroxyphenyl]carbamoyl]-  
 1846-96-4, Coumarin, 3-[[m-hydroxyphenyl]carbamoyl]-  
 1846-97-5, Coumarin, 3-[[p-hydroxyphenyl]carbamoyl]-  
 1846-98-6, Coumarin, 3-(o-tolylcarbamoyl)- 1846-99-7,  
 Coumarin, 3-(m-tolylcarbamoyl)- 1847-00-3, Coumarin,  
 3-(p-tolylcarbamoyl)- 1847-01-4, Coumarin,  
 3-[[m-chlorophenyl]carbamoyl]- 1847-02-5, Coumarin,  
 3-[[p-chlorophenyl]carbamoyl]- 1847-03-6, Coumarin,  
 3,3'-[m-phenylenebis(iminocarbonyl)]di- 1847-05-8, Benzoic  
 acid, p-(2-oxo-2H-1-benzopyran-3-carboxamido)- 1847-06-9,  
 Coumarin, 3-(2-naphthylcarbamoyl)- 1847-07-0, Coumarin,  
 3-[[p-2-benzothiazolylphenyl]carbamoyl]- 2199-78-2, Coumarin,  
 3-[[p-acetamidophenyl]carbamoyl]- 2199-80-6, Coumarin,  
 3-(cyclopentylcarbamoyl)-6-methyl- 3855-83-2, Coumarin,  
 3-(s-triazol-3-ylcarbamoyl)- 3949-37-9, Coumarin,  
 3-(octadecylcarbamoyl)- 3949-38-0, Coumarin,  
 3,3'-[trimethylenebis(iminocarbonyl)]di- 3949-39-1, Coumarin,  
 3-[[o-methoxyphenyl]carbamoyl]- 3949-40-4, Coumarin,  
 3-[[o-acetamidophenyl]carbamoyl]- 4021-23-2, Coumarin,  
 3-(cyclohexylcarbamoyl)- 4499-27-8, Coumarin,  
 3-[[m-acetamidophenyl]carbamoyl]- 96168-38-6, Coumarin,  
 3-[[p-(phenylsulfamoyl)phenyl]carbamoyl]-  
 (spectrum of)  
 RN 1846-78-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



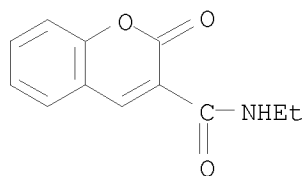
10/513699



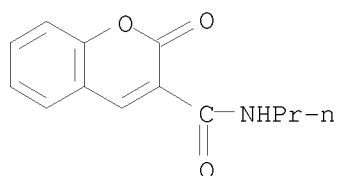
RN 1846-79-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-methyl-2-oxo- (CA INDEX NAME)



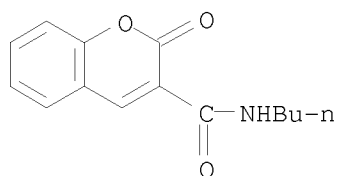
RN 1846-80-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-ethyl-2-oxo- (CA INDEX NAME)



RN 1846-81-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-propyl- (CA INDEX NAME)

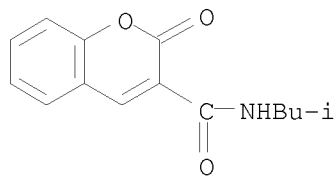


RN 1846-83-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-butyl-2-oxo- (CA INDEX NAME)

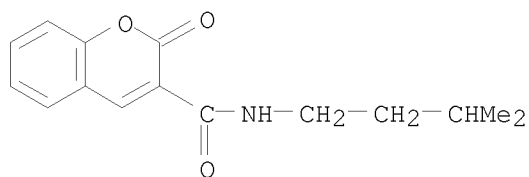


10/513699

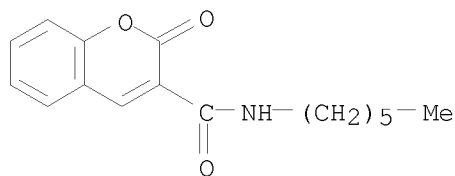
RN 1846-84-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylpropyl)-2-oxo- (CA INDEX NAME)



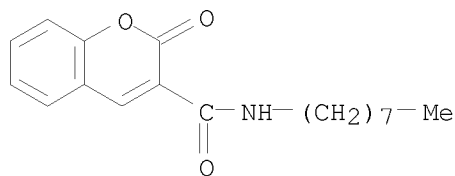
RN 1846-85-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylbutyl)-2-oxo- (CA INDEX NAME)



RN 1846-86-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-hexyl-2-oxo- (CA INDEX NAME)

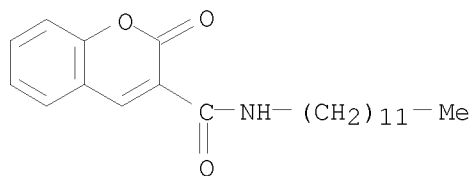


RN 1846-87-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-octyl-2-oxo- (CA INDEX NAME)

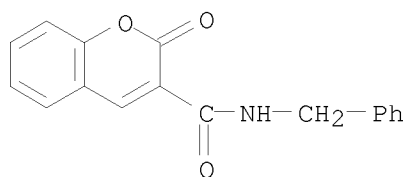


RN 1846-88-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-dodecyl-2-oxo- (CA INDEX NAME)

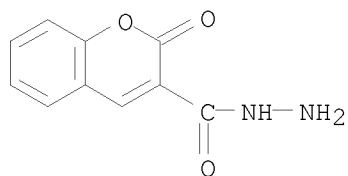
10/513699



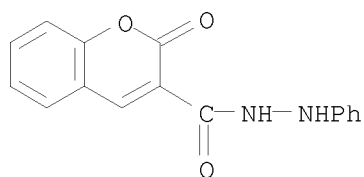
RN 1846-90-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



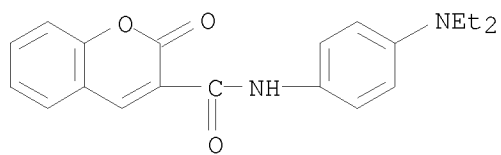
RN 1846-91-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)



RN 1846-92-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX NAME)



RN 1846-93-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(diethylamino)phenyl]-2-oxo- (CA INDEX NAME)



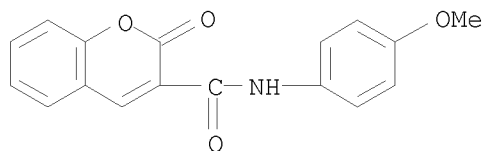
<12/04/2007>

Erich Leese

10/513699

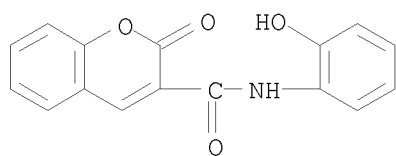
RN 1846-94-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



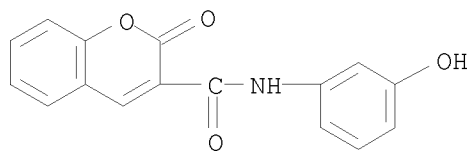
RN 1846-95-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-hydroxyphenyl)-2-oxo- (CA INDEX NAME)



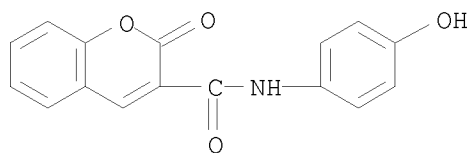
RN 1846-96-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-hydroxyphenyl)-2-oxo- (CA INDEX NAME)



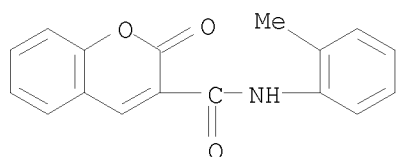
RN 1846-97-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-hydroxyphenyl)-2-oxo- (CA INDEX NAME)



RN 1846-98-6 CAPLUS

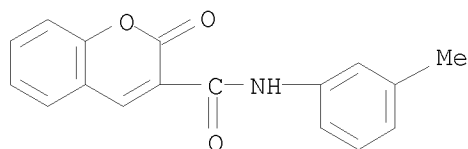
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)



10/513699

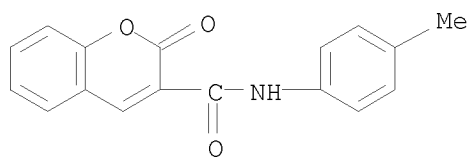
RN 1846-99-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)



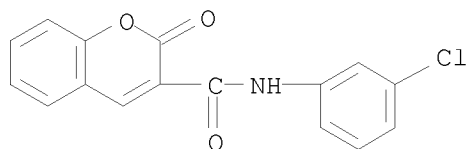
RN 1847-00-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



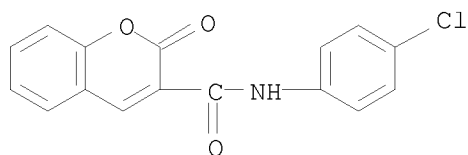
RN 1847-01-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chlorophenyl)-2-oxo- (CA INDEX NAME)



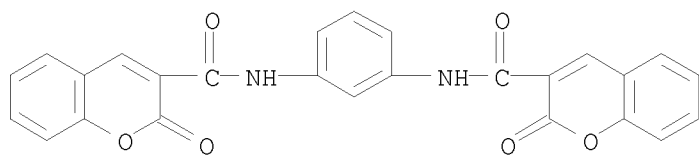
RN 1847-02-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



RN 1847-03-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,3-phenylenebis[2-oxo- (CA INDEX NAME)



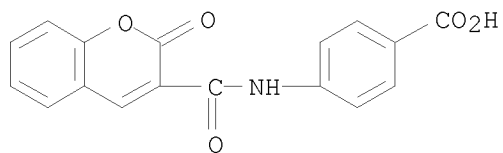
<12/04/2007>

Erich Leese

10/513699

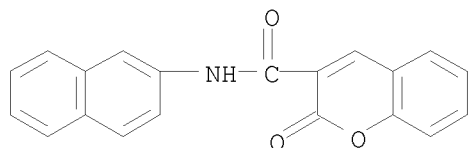
RN 1847-05-8 CAPLUS

CN Benzoic acid, 4-[[ (2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]- (CA INDEX NAME)



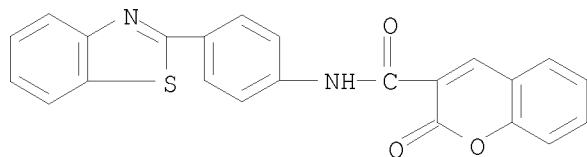
RN 1847-06-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-2-naphthalenyl-2-oxo- (CA INDEX NAME)



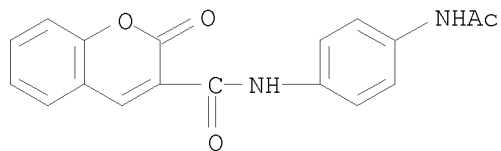
RN 1847-07-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[4-(2-benzothiazolyl)phenyl]-2-oxo- (CA INDEX NAME)



RN 2199-78-2 CAPLUS

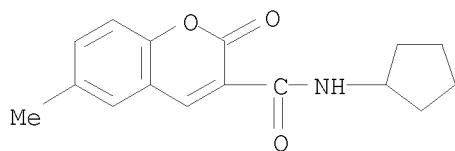
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(acetylamino)phenyl]-2-oxo- (CA INDEX NAME)



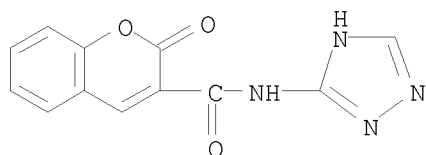
RN 2199-80-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-cyclopentyl-6-methyl-2-oxo- (CA INDEX NAME)

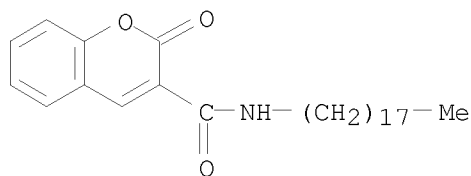
10/513699



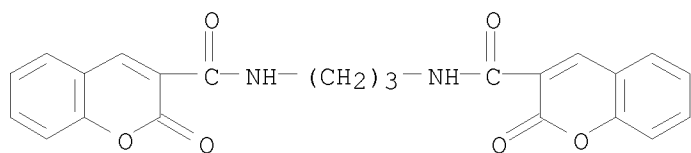
RN 3855-83-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-1H-1,2,4-triazol-5-yl- (CA INDEX NAME)



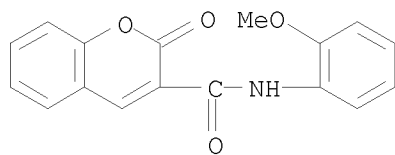
RN 3949-37-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-octadecyl-2-oxo- (CA INDEX NAME)



RN 3949-38-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N,N'-1,3-propanediylbis[2-oxo- (CA INDEX NAME)



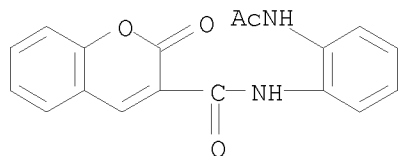
RN 3949-39-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methoxyphenyl)-2-oxo- (CA INDEX NAME)



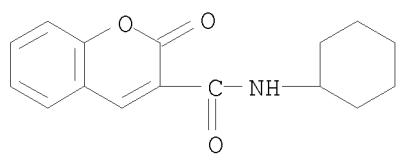
RN 3949-40-4 CAPLUS

10/513699

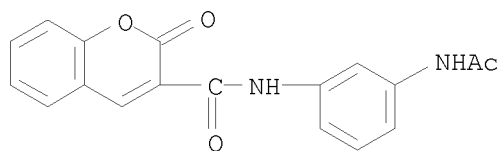
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(acetylamino)phenyl]-2-oxo- (CA INDEX NAME)



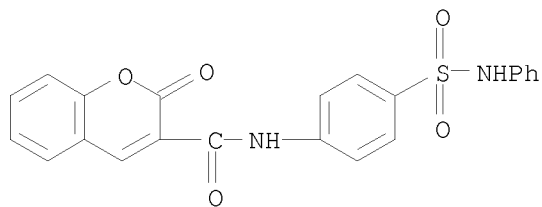
RN 4021-23-2 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-cyclohexyl-2-oxo- (CA INDEX NAME)



RN 4499-27-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[3-(acetylamino)phenyl]-2-oxo- (CA INDEX NAME)



RN 96168-38-6 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-[4-[(phenylamino)sulfonyl]phenyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)



10/513699

L9 ANSWER 327 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:418783 CAPLUS  
DOCUMENT NUMBER: 61:18783  
ORIGINAL REFERENCE NO.: 61:3242e-h  
TITLE: Coumarin derivatives  
PATENT ASSIGNEE(S): CIBA Ltd.  
SOURCE: 10 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 914719		19630102	GB 1961-2834	19610124 <--
CH 390918			CH	
DE 1222014			DE	
PRIORITY APPLN. INFO.:			CH	19600205

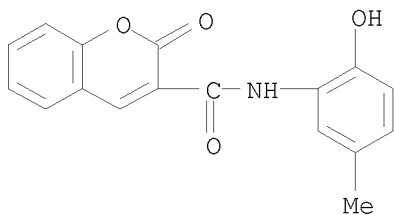
GI For diagram(s), see printed CA Issue.

AB A mixture of 38.0 parts coumarin-3-carboxylic acid and 21.8 parts o-HOC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> in 300 parts pyrophosphoric acid was stirred anaerobically at 165° for 1.5 hrs., then at 190° for 1.5 hrs., cooled to 80° and poured into 1000 parts H<sub>2</sub>O to give 44.2 parts I, R<sub>1</sub> = R<sub>2</sub> = R<sub>3</sub> = R<sub>4</sub> = H, m. 184-5.5° (5:3 EtOH-H<sub>2</sub>O). Similarly prepared were the following I (R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, % yield, and m.p. given): H, H, 5-Me, H (II), 80.8, 181-2° (EtOH); H, H, 6-Me, H, 91.2, 196-7° (2:3 dioxane-H<sub>2</sub>O); H, H, 5-Me, 6-Me, 90.7, 234-5.8° (1:1 dioxane-H<sub>2</sub>O); H, H, 5-Cl, H, 90.2, 245-6° (4:1:1 dioxane-EtOH-H<sub>2</sub>O); H, Me, 5-Me, H, 46.4, 163.5-4.5° (1:1 EtOH-H<sub>2</sub>O); 6-Me, H, H, H, 86.7, 208.5-9.5° (1:1 dioxane-H<sub>2</sub>O); 6-Me, H, 5-Me, H, 90.2, 186-6.6° (5:2 EtOH-H<sub>2</sub>O); 6-Me, H, 6-Me, H, 90.2, 177-8° (EtOH-H<sub>2</sub>O); 6-Me, H, 5-Me, 6-Me, 91.4, 218-20.5° (dioxane-H<sub>2</sub>O); 6-Me, H, 5-Cl, H, 84.3, 214.4-17.5° (dioxane-EtOH); 6-Cl, H, H, H, 76.4, 228-9.2° (dioxane-H<sub>2</sub>O); 6-Cl, H, 5-Me, H, 62.7, 223.5-4.5° (dioxane-H<sub>2</sub>O). II was also prepared by cyclization of coumarin-3-carboxylic acid 2-hydroxy-5-methylanilide, m. >300° (HCONMe<sub>2</sub>-EtOH). These compds. are useful as optical brighteners for polyester and polyamide fibers and for poly(vinyl chloride).

IT 94573-79-2P, Coumarin, 3-[(6-hydroxy-m-tolyl)carbamoyl]-  
RL: PREP (Preparation)  
(preparation of)

RN 94573-79-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-hydroxy-5-methylphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

<12/04/2007>

Erich Leese

10/513699

(1 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 328 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:418128 CAPLUS

DOCUMENT NUMBER: 61:18128

ORIGINAL REFERENCE NO.: 61:3058g-h,3059a-b

TITLE: Coumarin derivatives

AUTHOR(S): Lespagnol, Albert; Mercier, Jacques; Giraud, Pierre

SOURCE: Annales Pharmaceutiques Francaises (1964),  
22(2), 131-6

CODEN: APFRAD; ISSN: 0003-4509

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Some derivatives (I, R = NH<sub>2</sub>, NMe<sub>2</sub>, NEt<sub>2</sub>, NhPh, NHCH<sub>2</sub>Ph, morpholino, piperidino, pyrrolidino, or NHCONH<sub>2</sub>) of coumarin-3-carboxylic acid were prepared, and their toxicity and analgesic activity studied. Thus, a stream of dry NH<sub>3</sub> was passed during 15 min. through a solution of 15 g. ethyl coumarin-3-carboxylate (I, R = OEt) in 150 cc. EtOH at 90°. The solution was allowed to cool during 24 hrs.; the precipitate was filtered off

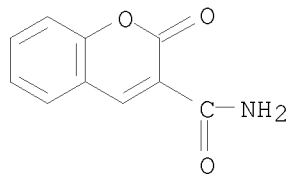
and

crystallized from dioxane to give 84% I (R = NH<sub>2</sub>), m. 266°. I (R = OH) (60 g.) and 300 g. SOCl<sub>2</sub> was refluxed for 2 hrs. and the cooled mixture poured into 500 cc. petr. ether to give 60 g. I (R = Cl), m. 147° (C<sub>6</sub>H<sub>6</sub>). A mixture of 30 g. I (R = Cl), 15 g. urea, and 400 cc. C<sub>6</sub>H<sub>6</sub> was heated at 100° for 2 hrs., The cooled mixture was filtered, the precipitate treated during 1 hr. with 500 cc. aqueous Na<sub>2</sub>CO<sub>3</sub>, filtered off, and washed with water, EtOH, and ether. The solid was crystallized from AcOH to give 20 g. I (R = NHCONH<sub>2</sub>), m. 250° (decomposition). Other amines were allowed to react with I (R = Cl) in a suitable solvent to give the corresponding I (R, reaction solvent, crystallization solvent, m.p., and % yield given): NMe<sub>2</sub>, ether, H<sub>2</sub>O, 145°, 72; NEt<sub>2</sub>, ether, 90% EtOH, 78°, 80; NHPh, dioxane, AcOEt, 248°, 74; NHCH<sub>2</sub>Ph, CHCl<sub>3</sub>, 90% EtOH, 154°, 75; morpholino, HCCl<sub>3</sub>, H<sub>2</sub>O, 123°, 88; piperidino, C<sub>6</sub>H<sub>6</sub>, 90% EtOH, 180°, 81; pyrrolidino, C<sub>6</sub>H<sub>6</sub>, H<sub>2</sub>O, 140°, 90.

IT 1846-78-2P, Coumarin, 3-carbamoyl- 1846-90-8P,  
Coumarin, 3-(benzylcarbamoyl)- 54396-25-7P, Coumarin,  
3-(phenylcarbamoyl)- 95876-97-4P, Coumarin, 3-allophanoyl-  
RL: PREP (Preparation)  
(preparation of)

RN 1846-78-2 CAPLUS

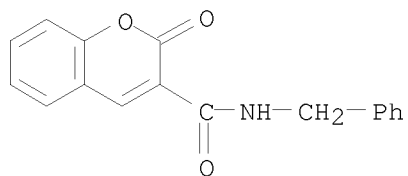
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



RN 1846-90-8 CAPLUS

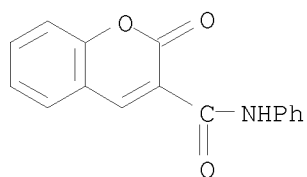
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)

10/513699



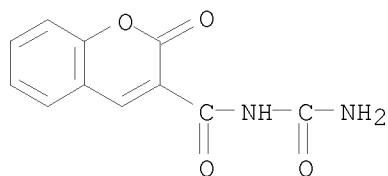
RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 95876-97-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-2-oxo- (CA INDEX NAME)



L9 ANSWER 329 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:411139 CAPLUS

DOCUMENT NUMBER: 61:11139

ORIGINAL REFERENCE NO.: 61:1793a-e

TITLE: Preparation of malon-2,5-xylidic acid and a study of some of its reactions

AUTHOR(S): Philip, Abraham; Ittyerah, P. I.

CORPORATE SOURCE: St. John's Coll., Agra

SOURCE: Indian Journal of Applied Chemistry (1963), 26(5-6), 168-70

CODEN: IJACAN; ISSN: 0019-5065

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB 2,5- Xylidine (10 g.) and 20 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> refluxed 45 min., allowing the alc. to dist. and the malonate to flow back, cooled, and mixed with alc. gave 9.8 g. malondi(2,5-xylidide) (I), m. 231°, and 10 g. 2,5-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NHCOCH<sub>2</sub>CO<sub>2</sub>H (II), m. 155° (decomposition). Effects of variations induration of heating and in the mol. proportion of the amine and ester were studied and the maximum yield of the products was obtained as described above. In another experiment, after refluxing the mixture of amine

and

malonic ester and removing I, 4 g. Et malon-2,5-xylidate (III), m. 130°, was obtained. III (2 g.) in 10 ml. alc. added slowly to 25 ml. ammonia liquor and kept 1 hr. gave 2 g. malon-2,5-xylidamide, m. 192°. III (2 g.) in alc. treated 10 min. with 3 ml. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O gave malon-2,5-xylidic acid hydrazide, m. 234°. The general method for the preparation of malon-2,5-xylidic acid hydrazones consisted of mixing equimolar amts. of the carbonyl compound and the acid hydrazide in alc., and keeping 0.5 hr. or refluxing for 1 hr. Thus were prepared >50% IV (carbonyl compound and m.p. given): BzH, 234°; 3,5-dibromosalicylaldehyde, 226°; 3,5-dinitrosalicylaldehyde, 97°; 3-nitro-5-chlorosalicylaldehyde, 192°; piperonal, 207°; 2-thiophenecarboxaldehyde, 186°; PhCOMe, 215°. The hydrazone from MeCOEt could not be prepared BzH (0.5 g.) and 1 g. II heated 4 hrs. at 100° gave 0.65 g. benzylidenemalon-2,5xylidic acid (V), m. 218°, and 0.25 g. cinnam-2,5-xylidic acid (VI), m. 185° (alc.). On using AcOH as a condensing agent, 53% V and 45% VI were obtained. With a trace of C<sub>5</sub>H<sub>5</sub>N or piperidine there was complete decarboxylation to 85% VI. Heating equimol. amts. of salicylaldehyde and II 4 hrs. at 100° gave the 2,5-xylidide (VII) of coumarin-3-carboxylic acid, m. 193°, and 2-hydroxybenzal-2,5-xylidide (VIII), m. 96°. Condensation of salicylaldehyde and 2,5-xylidine gave VIII. Maximum yield of VII (25%) was obtained when a trace of C<sub>5</sub>H<sub>5</sub>N or piperidine was used as a condensing agent. Heating a mixture of 0.8 g. chloral hydrate and II 4 hrs. at 100° gave 34% γ-trichloro-croton-2,5 xylidide, m. 84°.

IT 94905-44-9P, Coumarin, 3-(2,5-xylylcarbamoyl)-

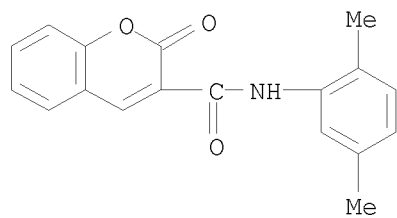
RL: PREP (Preparation)

(preparation of)

RN 94905-44-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2,5-dimethylphenyl)-2-oxo- (CA INDEX NAME)

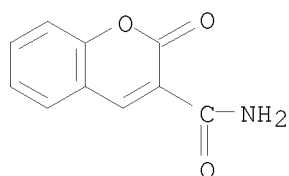
10/513699



<12/04/2007>

Erich Leese

L9 ANSWER 330 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1964:75165 CAPLUS  
 DOCUMENT NUMBER: 60:75165  
 ORIGINAL REFERENCE NO.: 60:13178e-g  
 TITLE: Synthesis of N,N'-diaryl- $\beta$ -aminopropionamides  
 AUTHOR(S): Michurin, A. A.; Zil'berman, E. N.  
 CORPORATE SOURCE: Polytech. Inst., Gorki  
 SOURCE: Zhurnal Obshchei Khimii (1964), 34(2), 575-9  
 CODEN: ZOKHA4; ISSN: 0044-460X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB PhNH<sub>2</sub> treated in cold EtOH with H<sub>2</sub>NCOCH<sub>2</sub>CH<sub>2</sub>OSO<sub>3</sub>H gave  
 H<sub>2</sub>NCOCH<sub>2</sub>CH<sub>2</sub>OSO<sub>3</sub>H.RNH<sub>2</sub> (Ia) (R = Ph), decomposed 143°. Similarly were  
 prepared the following analogs (R and m.p. given): p-ClC<sub>6</sub>H<sub>4</sub>, 165°;  
 p-BrC<sub>6</sub>H<sub>4</sub>, 168-9°; p-MeC<sub>6</sub>H<sub>4</sub>, 166° (m-isomer m. 127°;  
 o-isomer m. 161°); p-MeOC<sub>6</sub>H<sub>4</sub>, 175-7° (o-isomer m.  
 114-15°); p-EtOC<sub>6</sub>H<sub>4</sub>, -; p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 108-9° (m-isomer m.  
 149°). Kinetic curves of formation of Ia are shown. Heating Ia in  
 a sealed tube 3 hrs. at 120° gave the following  
 RNHCOCH<sub>2</sub>CH<sub>2</sub>OSO<sub>3</sub>H.RNH<sub>2</sub> (I) and RNHCH<sub>2</sub>CH<sub>2</sub>CONHR (II) (R, and % yield and m.p.  
 of I and II resp., shown) Ph, 37, 149°, 54, 92°; p-ClC<sub>6</sub>H<sub>4</sub>,  
 12, 180°, 57, 141°; p-BrC<sub>6</sub>H<sub>4</sub>, 12, 178°, 79,  
 148.5°; p-MeC<sub>6</sub>H<sub>4</sub>, 16, 154°, 75, 143.5°; p-MeOC<sub>6</sub>H<sub>4</sub>,  
 10, 157°, 87, 136°; p-EtOC<sub>6</sub>H<sub>4</sub>, 16, 160°, 84,  
 140°; o-MeC<sub>6</sub>H<sub>4</sub>, --, --, 22, 123°; p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 51, --, --,  
 203°; m-isomer, --, --, 43, 170°. I (R = Ph) treated with  
 NH<sub>3</sub> in PrOH gave NH<sub>4</sub>  $\beta$ -N-phenylcarbamoylethyl sulfate, decomposed  
 150°, which with PhNH<sub>2</sub> 2 hrs. at 120° gave 83% II (R = Ph).  
 II (R = p-BrCH<sub>4</sub>) formed in 86% yield by heating p-BrC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>. H<sub>2</sub>SO<sub>4</sub> and the  
 free amine 3 hrs. at 120°.  
 IT 1846-78-2P, Coumarin, 3-carbamoyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 1846-78-2 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



10/513699

L9 ANSWER 331 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:75164 CAPLUS

DOCUMENT NUMBER: 60:75164

ORIGINAL REFERENCE NO.: 60:13178d-e

TITLE: Reaction of 3-carbethoxycoumarone with aliphatic and cycloaliphatic amines

AUTHOR(S): Chiodoni, Ugo

CORPORATE SOURCE: Ferrainia S.p.A., Milan

SOURCE: Chimica e l'Industria (Milan, Italy) (1964),  
46(1), 54-6

CODEN: CINMAB; ISSN: 0009-4315

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Previous reports indicate that coumarones substituted at the 3 position readily undergo rupture of the 3,4-double bond under the action of N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O to form the salicylaldehyde hydrazone and the malonaldehyde dihydrazide. The effect of other compds. containing amino groups such as aliphatic, alicyclic, and aromatic amines have been determined. Aliphatic and alicyclic amines react with 3-carbethoxycoumarone (I) in the same way as N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O. Salicylaldimines and malondiamides result from ring opening and scission reactions. For example N,N'-bis(β-hydroxyethyl)malondiamide and salicylaldehyde are produced from H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH and I. Aromatic amines such as PhNH<sub>2</sub> and toluidine are inert under the conditions employed with N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O and aliphatic amines. Concentrated aqueous NH<sub>3</sub> does not cause ring scission but produces coumarone-3-carboxamide. The corresponding amides were also formed with aliphatic, alicyclic, and aromatic amines when treated stoichiometrically with I at a temperature between 100 and 140°. The weak basicity of NH<sub>3</sub> and aromatic amines appears to explain the absence of the scission reaction.

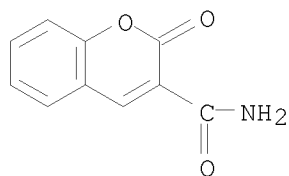
IT 1846-78-2P, Coumarin, 3-carbamoyl-

RL: PREP (Preparation)

(preparation of)

RN 1846-78-2 CAPLUS

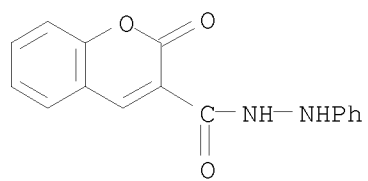
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)





L9 ANSWER 332 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1964:60623 CAPLUS  
DOCUMENT NUMBER: 60:60623  
ORIGINAL REFERENCE NO.: 60:10591b-e  
TITLE: Amides and hydrazides of oxalic acid. IV. Hydrazides  
of N-substituted oxamic acids  
AUTHOR(S): Petyunin, P. A.; Zakalyuzhnyi, M. V.  
CORPORATE SOURCE: Pharm. Inst., Perm  
SOURCE: Zhurnal Obshchei Khimii (1964), 34(1), 28-32  
CODEN: ZOKHA4; ISSN: 0044-460X  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB cf. CA 47, 5385e; 60, 1620e. The following RNHCOCO2Et (R shown) were  
prepared conventionally: 89.9% 2,4-dibromo-6-methylphenyl, m.  
139-40°; 81.3% p-thiocyanatophenyl, m. 144-6°; 66.6%  
p-carboxyphenyl, m. >300°; 74% 3-hydroxy-4-carboxyphenyl, decomposed  
243°. p-Ethoxyphenylthiourea and EtO2CCOCl in pyridine gave in 1  
hr. 77.4% N-ethoxalyl-N'-(p-ethoxyphenyl)thiourea (I), m. 161-3°.  
Similarly, 2-aminothiazole gave 61.4% Et 2-thiazolyloxamate, m.  
176-6.5°. Similarly was prepared 80% Et 2-benzothiazolyloxamate, m.  
183-4.5°. Keeping Et p-carboxyoxanilate with N2H4.H2O in EtOH 1  
hr. gave after treatment of the resulting precipitate with H2O and  
neutralization  
with AcOH, 71.7% RNHCOCONHNH2 (II) (R = p-HO2CC6H4), m. >300°;  
similarly were prepared 78.4% o-isomer, m. >300°, and 87.5% II [R =  
3,4- HO(HO2C)C6H3], decomposed 248°. Et thiooxanilate similarly gave  
53% PhNHCSCONHNH2, m. 137-9.5°. I and N2H4 gave 57%  
p-EtOC6H4NHCSNHCOCONHNH2, m. >300°; di-Et m-phenylenedioxamate  
similarly gave 92.8% m-C6H4(NHCOCONHNH2)2, m. >250°. The following  
II were prepared as above (R shown): 86% Et, m. 163-4°; 93.6%  
o-ClC6H4, m. 150-2°; 96.4% m-isomer, m. 199-201°; 93.6%  
p-isomer, m. 265-8°; 94.5% p-BrC6H4, decomposed 295°; 94.5%  
m-isomer, m. 192-3.5°; 93.3% 2,4-Cl2C6H3, m. 221-3°; 86.6%  
2,4,6-Br2MeC6H2, m. 242-3°; 94.5% p-MeC6H4, m. 212-13°;  
90.2% p-HOC6H4, decomposed 284°, 91.8% o-MeOC6H4, m. 162-3°;  
94% p-isomer, m. 228-30°; 98.6% p-EtOC6H4, m. 222-4°; 95.3%  
PhCH2, m. 190-2°; 90.1% p-Et2NC6H4, m. 171-2.5°; 95.5%  
p-SCNC6H4, m. 221-3°; 85.3%; p-H2NSO2C6H4, m. >300°; 58%  
PhSO2, m. 112-14°; 91.7% 2-pyridyl, m. >300°; 89.3%  
2-thiazolyl, decomposed 250°; 84.7% 2-benzothiazolyl, m.  
>300°; 79.2% 2-furfuryl, m. 157-8°. Tests in vitro against  
human tuberculosis organism showed that compds. of type II have varying  
activity against it; the most active were the members with R = p-EtOC6H4,  
p-MeC6H4, 3,4-HO(HO2C)C6H3, and p-ethoxyphenylthiooxalurohydrazide. The  
remaining I had low activities.  
IT 1846-92-0  
(Derived from data in the 7th Collective Formula Index (1962-1966))  
RN 1846-92-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX  
NAME)

10/513699



<12/04/2007>

Erich Leese

10/513699

L9 ANSWER 333 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:60622 CAPLUS

DOCUMENT NUMBER: 60:60622

ORIGINAL REFERENCE NO.: 60:10590h,10591a-b

TITLE: Reactions of hydrazine hydrate with coumarin derivatives

AUTHOR(S): Chiodoni, Vgo

CORPORATE SOURCE: Lab. Ric. Org. Ferrania Sp. A., Milan

SOURCE: Chimica e l'Industria (Milan, Italy) (1963), 45(8), 968-70

CODEN: CINMAB; ISSN: 0009-4315

DOCUMENT TYPE: Journal

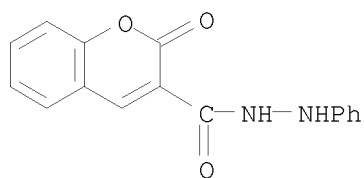
LANGUAGE: Unavailable

AB The action of N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O on coumarin or its derivs. was studied. Coumarin (40 g.) and 120 cc. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O at 30° yielded β-hydrazino-o-hydroxydihydroCinnamic acid hydrazide. Similarly, N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O and 3-carbethoxycoumarin gave the hydrazone (I) of salicylaldehyde, m. 96-7°. I and AcOH gave salicylaldazine, m. 214°. 6-Bromo-3-carbethoxycoumarin gave the hydrazone (II) of 6-bromosalicylaldehyde, m. 66-7°. AcOH and II gave 5,5'-dibromosalicylaldazine, m. 311-12°. 6,8-Dibromo-3-carbethoxycoumarin gave the hydrazone of 3,5-dibromosalicylaldehyde, m. 168-9° (III). AcOH and III gave 3,3',5,5'-tetrabromosalicylaldazine, m. 289°. Addition of 18 g. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O to a solution of 40 g. 3-carbethoxycoumarin in 200 cc. boiling EtOH gave the dihydrazide of malonic acid, m. 153-4°, and a residue in the mother liquors which with AcOH gave salicylaldazine. 3-Carbethoxycoumarin and PhNHNH<sub>2</sub> gave 3-carboxycoumarin-N-phenylhydrazide.

IT 1846-92-0P, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide  
RL: PREP (Preparation)  
(preparation of)

RN 1846-92-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, 2-phenylhydrazide (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 334 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:45494 CAPLUS

DOCUMENT NUMBER: 60:45494

ORIGINAL REFERENCE NO.: 60:7950h,7951a-b

TITLE: p-Iodomalonanilic acid and derivatives

AUTHOR(S): Asthana, B. P.; Ittyerah, P. I.

CORPORATE SOURCE: St. Johns Coll., Agra, India

SOURCE: Agra Univ. J. Res. (1963), 12(2), 81-5

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB p-Iodomalonanilic acid (I) was prepared and treated with aldehydes. A mixture of 5 g. of p-IC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> and 8 g. Et malonate was heated at reflux 1 h. with EtOH distilling as formed. On addition of 50 mL. absolute EtOH a crystallization precipitate of malonbis(p-iodoanilide) was formed, m. 256°. A solution of 5 g. Na<sub>2</sub>CO<sub>3</sub> in 40 mL. H<sub>2</sub>O was added to the solution, steam passed through the solution 1 h. and the solution filtered and acidified with concentrated HCl to yield

4.6 g. I, m. 162° (decomposition). A mixture of 2 g. I and 0.7 g. BzH was heated on a steam bath 4 h., dissolved in aqueous Na<sub>2</sub>CO<sub>3</sub> and washed with Et<sub>2</sub>O, and acidified with concentrated HCl to give 1.7 g.

benzylidene-p-iodomalonanilic

acid, m. 214° (decomposition). Heating a mixture of I and BzH containing a small amount of pyridine produced cinnam-p-iodoanilide, m. 190°.

Similarly were prepared the following: 2-thenylidene-p-iodomalonanilic acid (II), m. 224°; 2-thienyl-p-acryl-p-iodoanilide (byproduct in preparation of II), m. 197°; o-chlorobenzylidene-p-iodomalonanilic acid (III), m. 205°; o-chlorocinnam-p-iodoanilide (byproduct in preparation of III), m. 186°. Heating a mixture of 0.8 g. salicylaldehyde, 2 g. I, and 1 drop pyridine 4 h. gave 0.4 g. salicylidene-p-iodoaniline, m. 131°; and 0.6 g. coumarin-3-carboxy-p-iodoanilide (IV), m. 236°.

3,5-Dichlorosalicylaldehyde and I reacted to give only

3,5-dichlorosalicylidene-p-iodoaniline, m. 190°.

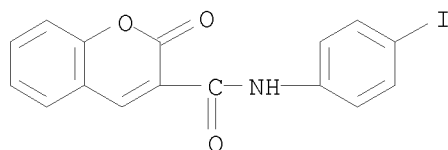
IT 92792-09-1P, Coumarin, 3-[(p-iodophenyl)carbamoyl]-

RL: PREP (Preparation)

(preparation of)

RN 92792-09-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-iodophenyl)-2-oxo- (CA INDEX NAME)



10/513699

L9 ANSWER 335 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:34007 CAPLUS

DOCUMENT NUMBER: 60:34007

ORIGINAL REFERENCE NO.: 60:6084f-g

TITLE: Tuberculostatic activity of coumarin derivatives. IV.  
The inhibition of the growth of M. tuberculosis by a  
coumarin derivative, G-25

AUTHOR(S): Mitani, Akira

CORPORATE SOURCE: School Med., Univ., Kanazawa, Japan

SOURCE: Juzen Igakukai Zasshi (1959), 63, 445-52

DOCUMENT TYPE: Journal

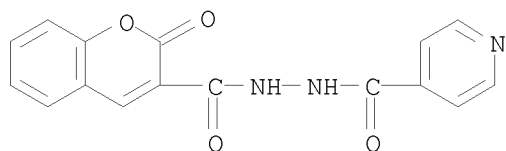
LANGUAGE: Unavailable

AB When tested against M. tuberculosis cultures, G-25 was superior to PAS but  
inferior to isoniazid in tuberculostatic activity. Blood samples obtained  
from patients treated with 300 mg. of G-25 were comparable in  
tuberculostatic activity to those from patients receiving 100 mg. of  
isoniazid, but G-25 appeared to remain in the blood stream longer.

IT 142818-74-4, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, compound  
with isonicotinic acid hydrazide  
(in tuberculosis treatment)

RN 142818-74-4 CAPLUS

CN 4-Pyridinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]hydrazide (CA INDEX NAME)



10/513699

L9 ANSWER 336 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:34006 CAPLUS

DOCUMENT NUMBER: 60:34006

ORIGINAL REFERENCE NO.: 60:6084e-f

TITLE: Tuberculostatic activity of coumarin derivatives. III.  
The effect of a coumarin derivative, G-25, in  
experimental tuberculosis

AUTHOR(S): Mitani, Akira

CORPORATE SOURCE: School Med., Univ., Kanazawa, Japan

SOURCE: Juzen Igakukai Zasshi (1959), 63, 432-44

DOCUMENT TYPE: Journal

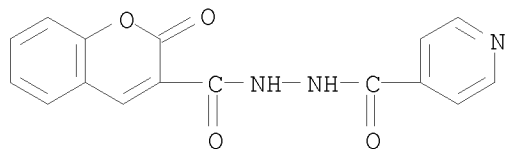
LANGUAGE: Unavailable

AB Acute and chronic toxicity of G-25 in mice and guinea pigs and its  
efficacy on guinea pigs tuberculosis were studied. The L.D.50 of G-25 by  
oral administration was >3 g. per kg. of body weight No evidence of hepatic  
or renal damages was observed in guinea pigs receiving daily doses of 3  
mg. of G-25 orally for 2 months.

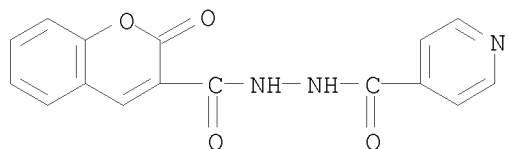
IT 142818-74-4, Tuberculostatic G 25  
(in tuberculosis treatment)

RN 142818-74-4 CAPLUS

CN 4-Pyridinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]hydrazide (CA INDEX NAME)



L9 ANSWER 337 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1964:34005 CAPLUS  
DOCUMENT NUMBER: 60:34005  
ORIGINAL REFERENCE NO.: 60:6084d-e  
TITLE: Tuberculostatic activity of coumarin derivatives. II.  
The in vitro tuberculostatic activity of coumarin  
derivatives against the human H37Rv strains of M.  
tuberculosis. 2  
AUTHOR(S): Mitani, Akira  
CORPORATE SOURCE: School Med., Univ., Kanazawa, Japan  
SOURCE: Juzen Igakukai Zasshi (1959), 63, 428-31  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB The in vitro inhibition of the growth of M. tuberculosis by 15 coumarin  
derivs., including 7 derivs. of halogenated coumarin, 2 of 3-substituted  
4-hydroxycoumarin, and 6 of coumarin sulfonamide and also 22 flavone  
derivs. was tested. In general, all the sulfonamide derivs. proved to  
possess relatively high tuberculostatic potency.  
4-Methyl-7-(p-aminophenylsulfonamoyl) coumarin was the most effective,  
though not so effective as G25. All the flavone derivs. tested were low  
in tuberculostatic activity. G-25 inhibited growth of p-aminosalicylic  
acid (PAS)-resistant and streptomycin-resistant, as well as PAS- and  
streptomycin-sensitive strains, but had no effect against  
isoniazid-resistant strains.  
IT 142818-74-4, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, compound  
with isonicotinic acid hydrazide  
(in tuberculosis treatment)  
RN 142818-74-4 CAPLUS  
CN 4-Pyridinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]hydrazide (CA INDEX NAME)



10/513699

L9 ANSWER 338 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:34004 CAPLUS

DOCUMENT NUMBER: 60:34004

ORIGINAL REFERENCE NO.: 60:6084c-d

TITLE: Tuberculostatic activity of coumarin derivatives. I.  
The in vitro tuberculostatic activity of coumarin  
derivatives against the human H37Rv strains of  
Mycobacterium tuberculosis. 1

AUTHOR(S): Mitani, Akira

CORPORATE SOURCE: School Med., Univ., Kanazawa, Japan

SOURCE: Juzen Igakukai Zasshi (1959), 63, 422-7

DOCUMENT TYPE: Journal

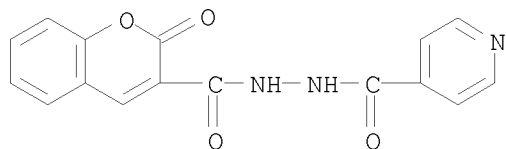
LANGUAGE: Unavailable

AB The in vitro tuberculostatic activity of 61 derivs. of coumarin, including  
9 derivs. of alkylcoumarin, 3 of thiocoumarin, 4 of oxocoumarin, 3 of  
nitrocoumarin, 12 of aminocoumarin, 8 of hydroxycoumarin, 15 of  
coumarin-carboxylic acid, 5 of naphthopyrone and 2 homologs of coumarin  
was tested. G-25, which is a synthetic compound of coumarin-3-carboxylic  
acid and isoniazid, was the most effective, inhibiting the growth of the  
M. tuberculosis in a concentration of 1.25  $\gamma$ /mL. of liquid medium. No other  
derivs. examined had any significant effect.

IT 142818-74-4, Tuberculostatic G 25  
(in tuberculosis treatment)

RN 142818-74-4 CAPLUS

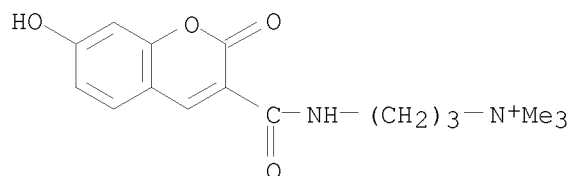
CN 4-Pyridinecarboxylic acid, 2-[(2-oxo-2H-1-benzopyran-3-  
yl)carbonyl]hydrazide (CA INDEX NAME)





10/513699

L9 ANSWER 339 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1963:463056 CAPLUS  
DOCUMENT NUMBER: 59:63056  
ORIGINAL REFERENCE NO.: 59:11707h,11708h  
TITLE: Internal stress and fatigue resistance of cellulose  
fibers  
AUTHOR(S): Gerasimova, L. S.; Pakshver, A. B.  
SOURCE: Khimicheskie Volokna (1963), (4), 42-5  
CODEN: KVLKA4; ISSN: 0023-1118  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB The interdependence of the internal stress and the fatigue resistance of  
viscose fibers is shown. Heating of the fibers at higher temps. and  
treatment with H2O and acids reduce the internal stress. Reduction of the  
degree of polymerization of cellulose also reduces the fatigue resistance  
of the fibers. Cross-linking of acetal groups increases the strength  
properties and the fatigue resistance of viscose fibers.  
IT 106410-55-3  
(Derived from data in the 7th Collective Formula Index (1962-1966))  
RN 106410-55-3 CAPLUS  
CN [3-(7-Hydroxy-2-oxo-2H-1-benzopyran-3-carboxamido)propyl]trimethylammonium  
methyl sulfate (7CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 106410-54-2  
CMF C16 H21 N2 O4



CM 2  
  
CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

10/513699

L9 ANSWER 340 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1963:463055 CAPLUS

DOCUMENT NUMBER: 59:63055

ORIGINAL REFERENCE NO.: 59:11707h

TITLE: Some fundamentals of stretch cottons

AUTHOR(S): Olson, Edward S.

CORPORATE SOURCE: Clemson Coll., Clemson, SC

SOURCE: American Dyestuff Reporter (1963), 52(18),  
672-79, 701

CODEN: ADREAI; ISSN: 0002-8266

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Specific methods for making knitted stretch fabrics with high recoverable stretch are given in detail. Application of short-chain bifunctional resins with cross-linking properties improved the elastic properties of cotton. Mercerization with or without tension increased the elongation and recovery. The elastic behavior of yarns was increased by methods which enhanced the individual freedom of motion of the fibers.

IT 106410-55-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

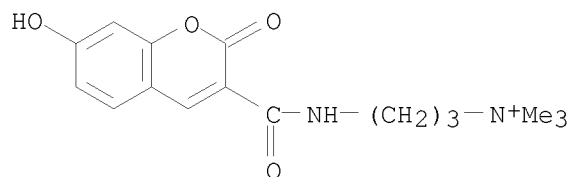
RN 106410-55-3 CAPLUS

CN [3-(7-Hydroxy-2-oxo-2H-1-benzopyran-3-carboxamido)propyl]trimethylammonium methyl sulfate (7CI) (CA INDEX NAME)

CM 1

CRN 106410-54-2

CMF C16 H21 N2 O4



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

L9 ANSWER 341 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1963:53878 CAPLUS  
 DOCUMENT NUMBER: 58:53878  
 ORIGINAL REFERENCE NO.: 58:9266a-f  
 TITLE: 6-( $\beta$ -Cyanoethoxy)benzothiazole sensitizers  
 INVENTOR(S): Roth, Curt B.; Horwitz, Lester; Levine, Harold A.  
 PATENT ASSIGNEE(S): General Aniline & Film Corp.  
 SOURCE: 5 pp.; Continuation-in-part of U.S. 2,928,-839 (CA 54, 15035f)  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3062815		19621106	US 1959-863087	19591231 <--

PRIORITY APPLN. INFO.: US 19591231

AB Ag halide emulsions can be sensitized with the title dyes. Thus, NaOH 48, KOH 48, and Na<sub>2</sub>S.9H<sub>2</sub>O 24 g. are heated at 250° in a Cu beaker; 40 g. 2-amino-6-methoxybenzothiazole is added, the mixture heated at 250-60° for 7 min., 800 ml. H<sub>2</sub>O is added, and the mixture filtered. AcO (400 ml.) is added to the filtrate, and the mixture is agitated for 30 min. The oil that forms is separated, the solution extracted 5 times with 400 ml. C<sub>6</sub>H<sub>6</sub>, the oil and exts. combined, the C<sub>6</sub>H<sub>6</sub> distilled, the residue refluxed with 400 ml. Ac<sub>2</sub>O for 1 hr., and the mixture distilled in vacuo to give 24 g. 2-methyl-6-acetoxybenzothiazole (I), m. 182°. I is saponified by heating with NaOH in aqueous MeOH to give 6-hydroxy-2-methylbenzothiazole (II), m. 163-4° (EtOH). II (8 g.), 13.3 g. CH<sub>2</sub>:CHCN, and 1 ml. Me<sub>3</sub>(PhCH<sub>2</sub>)NOH are refluxed on a steam bath for 20 hrs. and the product distilled in vacuo to give 6.6 g. 2-methyl-6-( $\beta$ -cyanoethoxy)benzothiazole (III), m. 122-3° (C<sub>6</sub>H<sub>6</sub>). III (6 g.) and 20 ml. EtI are heated in a sealed container on a steam bath for 6 hrs., and the product is triturated with Me<sub>2</sub>CO, C<sub>6</sub>H<sub>6</sub>, and ether to give 6-( $\beta$ -cyanoethoxy)-2-methylbenzothiazole ethiodide (IV). IV (0.187 g.) and 0.190 g. 2-(ethylthio)-6-methoxyquinoline ethiodide are dispersed in 7 ml. MeOH, 7 drops Eta3 is added, the mixture refluxed for 5 min., the mixture cooled to room temperature, centrifuged into 2 phases, the orange mother liquor is discarded, and the dye is purified by extraction with C<sub>6</sub>H<sub>6</sub>, Me<sub>2</sub>CO, and ether to give 0.155 g. 1',3-diethyl-6'-methoxy-6-( $\beta$ -cyanoethoxy)thiapseudocyanine iodide, m. 303-5°. The dye sensitizes a photographic gelatino Ag bromiodide emulsion to about 520-80 m $\mu$ , maximum sensitivity at about 540-60 m $\mu$ . Similarly prepared are 4',5'-benzo-6-( $\beta$ -cyanoethoxy)-3,9-diethyl-3'-methylthiacarbocyanine, m. 238-40°; 6'-( $\beta$ -cyanoethoxy)-3,3',9-triethyl-5-methoxyselenathiacarbocyanine iodide, m. 277-9°, sensitizing a photographic gelatino Ag bromiodide emulsion to about 660 m $\mu$  (maximum sensitivity at 625 m $\mu$ ); and 3-ethyl-3'-( $\beta$ -carboxyethyl)-5'-methyl-6'-( $\beta$ -cyanoethoxy)thiacarbocyanine iodide.

IT 106410-55-3  
 (Derived from data in the 7th Collective Formula Index (1962-1966))

RN 106410-55-3 CAPLUS

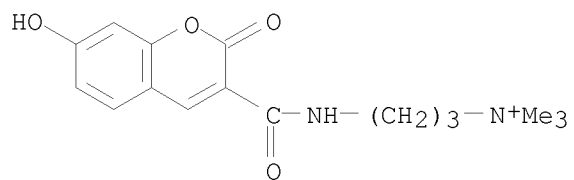
CN [3-(7-Hydroxy-2-oxo-2H-1-benzopyran-3-carboxamido)propyl]trimethylammonium methyl sulfate (7CI) (CA INDEX NAME)

10/513699

CM 1

CRN 106410-54-2

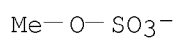
CMF C16 H21 N2 O4



CM 2

CRN 21228-90-0

CMF C H3 O4 S



10/513699

L9 ANSWER 342 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1963:53877 CAPLUS

DOCUMENT NUMBER: 58:53877

ORIGINAL REFERENCE NO.: 58:9265g-h,9266a

TITLE: Coumarin brightening agents

PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.

SOURCE: 4 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
GB 908784		19621024	GB 1960-1313	19600113 <--
DE 1205941			DE	
PRIORITY APPLN. INFO.:			DE	19590116

GI For diagram(s), see printed CA Issue.

AB Polyacrylonitrile and cellulose acetate fibers were brightened by treatment in aqueous solns. containing 0.03-0.05 g./l. I (X = O, NH; A = alkylene;

Y- = iodide, sulfate, etc.), boiling 45-60min., rinsing, and drying. Thus, Et 5,6-benzocoumarin-3-carboxylate (II) 268 and Me<sub>3</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub> (III) 125 parts were heated for 6 hrs. on a boiling water bath. The melt was ground with 1500 parts H<sub>2</sub>O, the crystal slurry added to 10,000 parts H<sub>2</sub>O, stirred 2 hrs., and filtered to give 5,6-benzocoumarin-3-carboxylic acid 3-dimethylaminopropylamide (IV), m. 122-4° (cyctohexane). IV 110 was quaternized by heating with Me<sub>2</sub>CO 600 and Me<sub>2</sub>SO<sub>4</sub> 50 parts to give the salt, m. 215-18° (EtOH). Similarly, other quaternary salts were prepared (alkylating agent, m.p. given): MeI, 252-4° (MeOH and H<sub>2</sub>O); EtI, 254-5° (MeOH and H<sub>2</sub>O); Et<sub>2</sub>SO<sub>4</sub>, 215-18° (MeOH); p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>Me, 190-3° (MeOH); p-MeC<sub>5</sub>H<sub>4</sub>SO<sub>3</sub>Et, 180-8° (EtOH). Similarly, other esters and amides were quaternized (coumarin, alc. or amine, alkylating agent, m.p. given): II, Me<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>OH, Me<sub>2</sub>SO<sub>4</sub>, 204-10° (MeOH); I, Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH, Me<sub>2</sub>SO<sub>4</sub>, 282°; II, Et<sub>2</sub>NCH<sub>2</sub>-CH<sub>2</sub>OH, Me<sub>2</sub>SO<sub>4</sub>, 235°; II, III, PhCH<sub>2</sub>Cl, 229-30° (EtOH-Et<sub>2</sub>O); II, Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, Me<sub>2</sub>SO<sub>4</sub>, 134-40° (EtOH); Et 7-hydroxycoumarin-3-carboxylate, III, Me<sub>2</sub>SO<sub>4</sub>, 238-47° (Me-OH); Et 7-dimethylaminocoumarin-3-carboxylate, III, Me<sub>2</sub>SO<sub>4</sub>, 265-7° (MeOH).

IT 106410-55-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

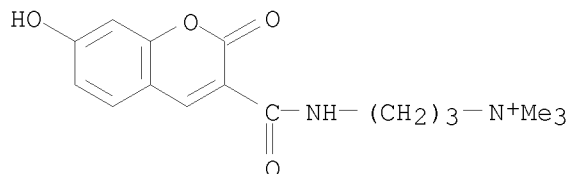
RN 106410-55-3 CAPLUS

CN [3-(7-Hydroxy-2-oxo-2H-1-benzopyran-3-carboxamido)propyl]trimethylammonium methyl sulfate (7CI) (CA INDEX NAME)

CM 1

CRN 106410-54-2

CMF C16 H21 N2 O4



<12/04/2007>

Erich Leese

10/513699

CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

<12/04/2007>

Erich Leese

L9 ANSWER 343 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1963:20726 CAPLUS

DOCUMENT NUMBER: 58:20726

ORIGINAL REFERENCE NO.: 58:3422f-h,3423a-c

TITLE: Some 1-substituted heterocyclic isoquinoline derivatives by Bischler-Napieralski reaction. III. Syntheses of isoquinoline derivatives of the coumarin series

AUTHOR(S): Morimoto, Yasuo

CORPORATE SOURCE: Gumma Univ., Maebashi

SOURCE: Yakugaku Zasshi (1962), 82, 389-94

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB °. 2-Oxo-2H-1-benzopyran-3-carboxylic acid (I), prepared from o-HOC<sub>6</sub>H<sub>4</sub>CHO and CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub>, m. 187-8°. Et ester (II) of I, m. 94-5°. I and SOCl<sub>2</sub> or PCl<sub>5</sub> gave the acid chloride (III) of I, m. 145°. A mixture of 5.45 g. II, 31 g. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O and 25 ml. Tetralin refluxed and the product concentrated in vacuo gave 0.5 g. 2-oxo-2H-1-benzopyran-3-carboxylic acid hydrazide (IV), m. 165-70° (EtOH). 3,4-CH<sub>2</sub>O<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH(OMe)CHMeNH<sub>2</sub> (V) (30 g.) in 100 ml. Me<sub>2</sub>CO and K<sub>2</sub>CO<sub>3</sub> at 0° treated dropwise with 33 g. III in 100 ml. Me<sub>2</sub>CO, the mixture stirred 8 hrs., and the product filtered off and washed with 5% Na<sub>2</sub>CO<sub>3</sub> gave 40.6 g. 3-(α-methyl-β-methoxy-3,4-methylenedioxyphenethylcarbamoyl)-2-oxo-2H-1-benzopyran (VI), m. 164-5° (EtOH). Or, 3.45 g. V and 3.27 g. II refluxed 3.5 hrs. on an oil bath and the product washed with 5% HCl gave 5.5 g. VI, m. 164-5°. VI (13.3 g.) in 100 ml. dry C<sub>6</sub>H<sub>6</sub> and 37 ml. POCl<sub>3</sub> refluxed 1 hr., cooled, petr. ether added, the whole kept overnight, the solvent layer decanted, the oily layer heated with 5-8% HCl, and the product filtered off, gave 1-(2-oxo-2H-1-benzopyran-3-yl)-3-methyl-6,7-methylenedioxyisoquinoline (VII)-HCl, m. 258-9° (decomposition). VII.HCl treated with dilute NH<sub>4</sub>OH gave 4.6 g. VII, m. 291° (EtOH); picrate, m. 233-4° (decomposition). Or, 5 g. VI in 30 ml. PhMe and 14 ml. POCl<sub>3</sub> refluxed 1 hr. and the product treated as above gave 1.1 g. VII, m. 291. I and concentrated HNO<sub>3</sub>-concentrated H<sub>2</sub>SO<sub>4</sub> gave 2-oxo-6-nitro-2H-1-benzopyran-3-carboxylic acid, m. 234-5°; Me ester (VIII), m. 215-16°. 2-Oxo-6-nitro-2H-1-benzopyran-3-carbonyl chloride (IX), m. 171-2° (Me<sup>o</sup>CO). VIII (2.49 g.) in 350 ml. MeOH, 24.9 g. C<sub>5</sub>H<sub>5</sub>N and N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in excess refluxed and the product filtered off gave 2-oxo-6-nitro-2H-1-benzopyran-3-carboxylic acid hydrazide (X), m. 152-3°. A mixture of 30 g. V in 100 ml. Me<sub>2</sub>CO and 40 g. IX in 700 ml. Me<sub>2</sub>CO with 20 g. K<sub>2</sub>CO<sub>3</sub> was treated as in VI to give 35 g. 3-(α-methyl-β-methoxy-3,4-methylenedioxyphenethylcarbamoyl)-2-oxo-6-nitro-2H-1-benzopyran (XI), m. 190-4°. Or, 10.8 g. V and 12.9 g. VIII heated 4 hrs. on an oil bath gave 12.2 g. XI, m. 190-2° (MeOH). A mixture of 12.78 g. XI, 100 ml. C<sub>6</sub>H<sub>6</sub> and 36 ml. POCl<sub>3</sub> refluxed 1 hr. and the product treated as in VII gave 1.2 g. 1-(2-oxo-6-nitro-2H-1-benzopyran-3-yl)-3-methyl-6,7-methylenedioxyisoquinoline (XII), m. 321°; XII.HCl m. 92-6° (decomposition); picrate m. 250° (decomposition). 2-Oxo-2H-1-benzopyran-6-carboxylic acid (XIII), m. 268-9°, Me ester (XIV) m. 173-4° and the acid chloride (XV), m. 126°, were prepared by known methods. XIV (5.1 g.) in 300 ml. MeOH and 18.8 g. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O refluxed 8 hrs. and the product treated as usual gave 3 g. of the acid hydrazide (XVI) of XIII, m. 153-5°. V (15.68 g.) in 50 ml. Me<sub>2</sub>CO and 10.4 g. K<sub>2</sub>CO<sub>3</sub> treated dropwise with 17 g. XV in Me<sub>2</sub>CO and the

product treated as in VI gave 11 g.

6-( $\alpha$ -methyl- $\beta$ -methoxy-3,4-methylenedioxyphenethylcarbamoyl)-2-oxo-2H-1-benzopyran (XVII), m. 178-82°. Or, 2.3 g. V and 2.04 g. XIV heated 3 hrs. at 180-5° gave 2.5 g. XVII, m. 187-8°.

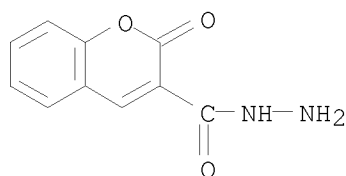
XVII (m. 178-82°) (6.7 g.), 400 ml. C<sub>6</sub>H<sub>6</sub> and 19 ml. POCl<sub>3</sub> refluxed 3 hrs. and the product treated as usual gave 0.9 g.

6-(3-methyl-6,7-methylenedioxy-1-isoquinolyl)coumarin or 1-(2-oxo-2H-1-benzopyran-6-yl)-3-methyl-6,7-methylenedioxyisoquinoline (XVIII), m. 298° (EtOH); XVIII.HCl m. 263-5° (decomposition); picrate m. 225-8° (decomposition).

IT 1846-91-9P, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide  
90765-81-4P, 2H-1-Benzopyran-3-carboxylic acid, 6-nitro-2-oxo-, hydrazide  
95867-02-0P, Coumarin, 3-[[ $\beta$ -methoxy- $\alpha$ -methyl-3,4-(methylenedioxy)phenethyl]carbamoyl]-6-nitro-  
95937-74-9P, Coumarin, 3-[[ $\beta$ -methoxy- $\alpha$ -methyl-3,4-(methylenedioxy)phenethyl]carbamoyl]-  
RL: PREP (Preparation)  
(preparation of)

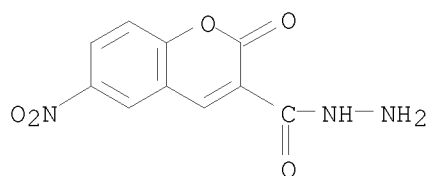
RN 1846-91-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)



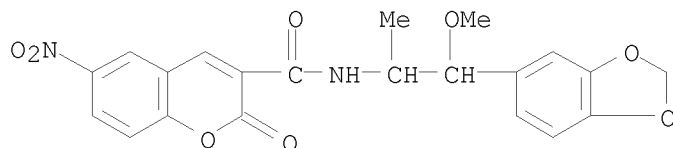
RN 90765-81-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-nitro-2-oxo-, hydrazide (CA INDEX NAME)



RN 95867-02-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)-2-methoxy-1-methylethyl]-6-nitro-2-oxo- (CA INDEX NAME)



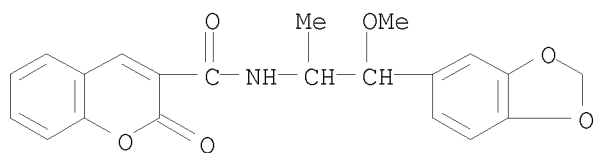
RN 95937-74-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)-2-methoxy-1-



10/513699

methylethyl]-2-oxo- (CA INDEX NAME)



<12/04/2007>

Erich Leese

L9 ANSWER 344 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1963:20724 CAPLUS

DOCUMENT NUMBER: 58:20724

ORIGINAL REFERENCE NO.: 58:3421g-h,3422a-d

TITLE: Some I-substituted heterocyclic isoquinoline derivatives by Bischler-Napieralski reaction. I. Synthesis of isoquinoline derivatives of the pyrimidine series

AUTHOR(S): Morimoto, Yasuo

CORPORATE SOURCE: Gumma Univ., Maebashi

SOURCE: Yakugaku Zasshi (1962), 82, 386-9

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB 2-R-substituted-4-methyl-5-pyrimidinecarboxylic acid (I) (R = Ph) (10.7 g.) and 29.75 g. SOCl<sub>2</sub> with a few drops dry C<sub>5</sub>H<sub>5</sub>N heated on a H<sub>2</sub>O bath and the solution concentrated in vacuo gave 100% II.HCl (R = Ph) (III), m. 176-8° (decomposition). Similarly were prepared II (R = o-MeC<sub>6</sub>H<sub>4</sub>) (IV), m. 163°; II (R = p-MeC<sub>6</sub>H<sub>4</sub>) (V), m. 165° (decomposition), and Et ester of V, m. 78-80°. This last was converted, via the hydrazide, to 2-p-tolyl-4-methyl-5-pyrimidinecarboxylic acid azide (VI), m. 127° (decomposition). Homopiperonylamine (5.3 g.) in dry Me<sub>2</sub>CO and 5 g. K<sub>2</sub>CO<sub>3</sub> at 0° treated dropwise with 8.1 g. III in 550 ml. Me<sub>2</sub>CO, H<sub>2</sub>O added, the whole made alkaline with 5% Na<sub>2</sub>CO<sub>3</sub>, washed with 5% HCl and the Me<sub>2</sub>CO layer concentrated gave 1.7 g. 2-R-substituted-4-methyl-5-(3,4-methylenedioxyphenethylcarbamoyl)pyrimidine (VII) (R = Ph) (VIII), m. 199° (EtOH). VIII (1.6 g.) in 100 ml. dry C<sub>6</sub>H<sub>6</sub> and 4.4 ml. POCl<sub>3</sub> refluxed 50 min., large amount of petr. ether added, the mixture kept overnight, the upper layer decanted, the residue treated with warm 5% HCl, filtered, the filtrate concentrated, the residue in 5% HCl at 0° neutralized with NH<sub>4</sub>OH, and the product filtered off gave 1-(2-phenyl-4-methyl-5-pyrimidinyl)-3,4-dihydro-6,7-methylenedioxyisoquinoline (IX); monopicrate, m. 222° (decomposition) (EtOH). III (5.3 g.) in 400 ml. Me<sub>2</sub>CO treated with 5 g. K<sub>2</sub>CO<sub>3</sub> and 4 g. 3,4-CH<sub>2</sub>O<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CHMeNH<sub>2</sub> (X) in Me<sub>2</sub>CO and the product treated as in VIII gave 2.8 g. 2-R-substituted-4-methyl-5-(αmethyl-3,4-methylenedioxyphenethylcarbamoyl)pyrimidine (XI) (R = Ph) (XII), m. 140-5°. XII (0.5 g.) in 5 ml. PhMe and 1.4 ml. POCl<sub>3</sub> treated as in IX gave 0.2 g. 1-(2-phenyl-4-methyl-5-pyrimidinyl)-3-methyl-3,4-dihydro-6,7-methylenedioxyisoquinoline, m. 203-5°. X (5 g.) in a small amount of CHCl<sub>3</sub>, 5 g. K<sub>2</sub>CO<sub>3</sub>, and 5.96 g. IV in 350 ml. CHCl<sub>3</sub> treated as in VIII gave XI (R = o-MeC<sub>6</sub>H<sub>4</sub>) (XIII), viscous oil. XIII (9 g.) in 60 ml. PhMe and 24.8 ml. POCl<sub>3</sub> treated as in IX gave 1.5 g. 1-(2-o-tolyl-4-methyl-5-pyrimidinyl)-3-methyl-3,4-dihydro-6,7-methylenedioxyisoquinoline, m. 295°. V (3 g.) in 160 ml. CHCl<sub>3</sub> and 3 g. X in 30 ml. CHCl<sub>3</sub> with 3.5 g. K<sub>2</sub>CO<sub>3</sub> treated as in VIII gave 5 g. XI (R = p-MeC<sub>6</sub>H<sub>4</sub>) (XIV), m. 153-5°. Or, 3 g. Et ester of III and 2.1 g. X heated 10 hrs. at 220-30°, treated with 2.1 g. X, and the product treated with 10% HCl and MeOH gave 3.8 g. XIV. Or, 5.2 g. VI in AcOEt dried with Na<sub>2</sub>SO<sub>4</sub> and allowed to stand several days with 3.6 g. X gave 4.6 g. XIV, m. 170°. A mixture of 5 g. XIV, 45 ml. PhMe and 13.8 g. POCl<sub>3</sub> refluxed 2 hrs. and the product treated as usual gave a small amount of 1-(2-p-tolyl-4-methyl-5-pyrimidinyl)-3-methyl-3,4-dihydro-6,7-methylenedioxyisoquinoline (XV), m. 130-70° (decomposition). Cyclization of an amide from the Et ester of V and POCl<sub>3</sub> gave XV; picrate m. 235-6° (decomposition). Or, 2 g. VI in 15 ml. PhMe and 6.6 ml. POCl<sub>3</sub>

10/513699

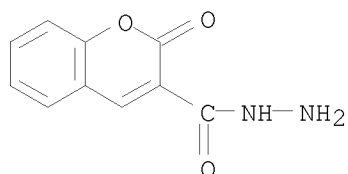
refluxed 50 min. and the product treated as usual gave 1 g. XV; picrate m.  
235° (decomposition).

IT 1846-91-9 90765-81-4 95867-02-0  
95937-74-9

(Derived from data in the 7th Collective Formula Index (1962-1966))

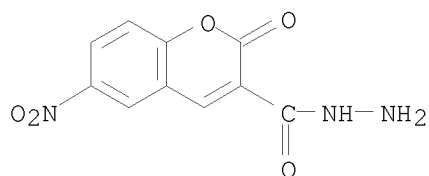
RN 1846-91-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)



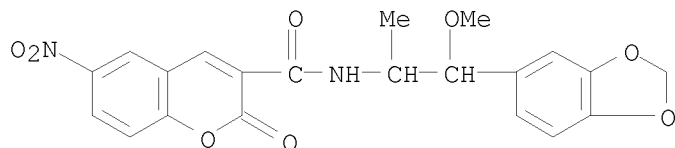
RN 90765-81-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxylic acid, 6-nitro-2-oxo-, hydrazide (CA INDEX NAME)



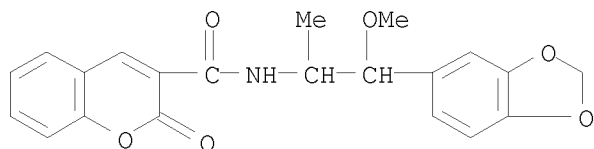
RN 95867-02-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)-2-methoxy-1-methylethyl]-6-nitro-2-oxo- (CA INDEX NAME)

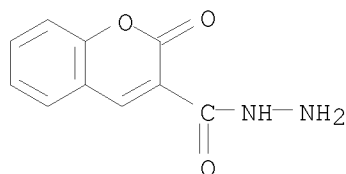


RN 95937-74-9 CAPLUS

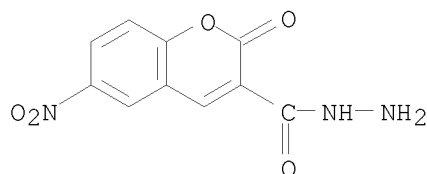
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)-2-methoxy-1-methylethyl]-2-oxo- (CA INDEX NAME)



L9 ANSWER 345 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1963:20723 CAPLUS  
 DOCUMENT NUMBER: 58:20723  
 ORIGINAL REFERENCE NO.: 58:3421f-g  
 TITLE: Synthesis of 6-fluoro-9-methylpurine  
 AUTHOR(S): Beaman, Alden G.; Robins, Roland K.  
 CORPORATE SOURCE: Arizona State Univ., Tempe  
 SOURCE: Journal of Medicinal & Pharmaceutical Chemistry ( 1962), 5, 1067-74  
 CODEN: JMPCAS; ISSN: 0095-9065  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 58:20723  
 GI For diagram(s), see printed CA Issue.  
 AB 4,6-Dichloro-5-nitropyrimidide, upon treatment with AgF, gave 4,6-difluoro-5-nitropyrimidine (I) which was monoaminated and reduced to yield 4,5-diamino-6-fluoropyrimidine. This substance failed to cyclize to 6-fluoropurine by standard cyclization procedures. Reduction of I yielded 5-amino-4,6-difluoropyrimidine (II), and II with methylamine gave 5-amino-6-fluoro-4-methylaminopyrimidine which was readily cyclized to 6-fluoro-9-methylpurine (III). The chemistry of III is discussed.  
 IT 1846-91-9 90765-81-4 95867-02-0  
 95937-74-9  
 (Derived from data in the 7th Collective Formula Index (1962-1966))  
 RN 1846-91-9 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-, hydrazide (CA INDEX NAME)

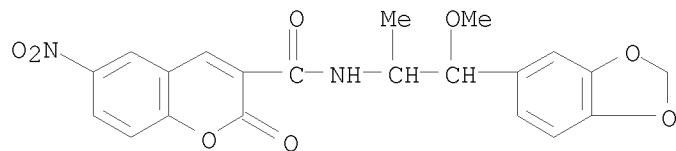


RN 90765-81-4 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxylic acid, 6-nitro-2-oxo-, hydrazide (CA INDEX NAME)



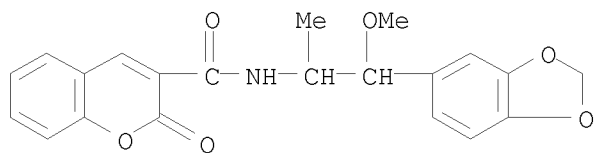
RN 95867-02-0 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)-2-methoxy-1-methylethyl]-6-nitro-2-oxo- (CA INDEX NAME)

10/513699



RN 95937-74-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)-2-methoxy-1-methylethyl]-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 346 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1962:410777 CAPLUS

DOCUMENT NUMBER: 57:10777

ORIGINAL REFERENCE NO.: 57:2182c-h

TITLE: Syntheses with cyanoacetic acid. III. The reaction of o-hydroxybenzaldehyde with cyanoacetamide and malono-nitrile

AUTHOR(S): Schiemenz, Guenter Paulus

CORPORATE SOURCE: Univ. Goettingen, Germany

SOURCE: Chem. Ber. (1962), 95, 483-6

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

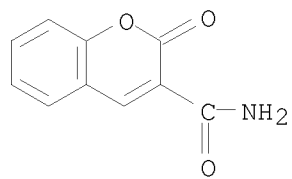
AB cf. CA 56, 12796h. The compds. previously regarded as o-HOC6H4CH:CHCONH2 and o-HOC6H4CH:C(CN)2 are in fact 3-coumarin-imidecarboxamide (I) and 3-cyanocoumarinimide (II). p-MeOC6H4CHO (III) (2.70 g.) in 10 cc. MeOH treated with 3.00 g. NCCH2CONH2 (IV) in 15 cc. H2O containing 0.2 cc. piperidine gave 3.00 g. p-MeOC6H4CH:C(CN)CONH2, needles, m. 212-13.5° (with sublimation) (EtOH). 4,3-HO(MeO)C6H3CHO (V) (3.00 g.) in 10 cc. MeOH with 3.00 g. IV and 0.2 cc. piperidine in 15 cc. H2O gave during 2 days 3.45 g. red needles, m. 216-17° (with sublimation) (EtOH). o-HOC6H4CHO (1.65 g.) in 100 cc. MeOH treated 3 days with 1.65 g. IV and 0.2 cc. piperidine in 15 cc. H2O, concentrated in vacuo, and filtered, the residue dissolved in boiling CHCl3, filtered from 77 mg. undissolved material, which did not melt up to 300°, and evaporated gave 1.48 g. I, decomposing at 180° on the preheated block (C6H6). I dissolved in dilute HCl and kept 2 days at room temperature deposited coumarin-3-carboxamide (VI), needles, m. 280-2° (preheated block), m. 273-4° (on slow heating). I (101 mg.) in 15 cc. absolute tetrahydrofuran treated with dry HCl precipitated 106 mg. I.HCl which began to sublime at 150° and decomposed gradually on further heating. A solution of I.HCl deposited on standing needles of VI. Piperidine (0.1 cc.) added with cooling to 3.00 g. III and 1.50 g. CH2(CN)2 in 3 cc. EtOH gave 3.48 g. p-MeOC6H4CH:C(CN)2, pale yellow needles, m. 117.5-18.5° (EtOH). V (3.00 g.), 1.50 g. CH2(CN)2, and 0.1 cc. piperidine in 10 cc. EtOH deposited within a few hrs. 3.55 g. 4,3-HO(MeO)C6H3CH:C(CN)2, yellowish needles, m. 136.5-39° (C6H6). o-HOC6H4CHO (2.43 g.), 1.38 g. CH2(CN)2, and 2 drops piperidine in 10 cc. EtOH deposited within a few hrs. 2.26 g. II, pale yellow crystals, m. 163-5° (decomposition). II (111 mg.) in 7 cc. dry tetrahydrofuran treated with dry HCl precipitated 93 rag. 3-cyanocoumarin (VII), m. 187-90° (with sublimation) (EtOH). Crude II (2.36 g.) in 35 cc. tetrahydrofuran left 0.31 g. material undissolved; the filtered solution treated with 2.0 cc. concentrated HCl, the precipitated HCl salt dissolved in 2.0 cc. H2O, refluxed 1 hr., and evaporated, and the cryst, residue 2.67 g. extracted with H2O left 1.71 g. VII, m. 187-900 (with sublimation) (EtOH).

IT 1846-78-2P, Coumarin, 3-carbamoyl-  
RL: PREP (Preparation)  
(preparation of)

RN 1846-78-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS  
RECORD (15 CITINGS)

L9 ANSWER 347 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1959:106773 CAPLUS

DOCUMENT NUMBER: 53:106773

ORIGINAL REFERENCE NO.: 53:19158e-i

TITLE: Coumarin derivatives for therapeutic use. XIII.  
Hypothermal action. 2

AUTHOR(S): Kitagawa, Haruo; Iwaki, Riichiro

CORPORATE SOURCE: Univ. Toyama

SOURCE: Yakugaku Zasshi (1959), 79, 639-43

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 52, 18874b. 6-Chlorocoumarin (I) (0.5 g.) at its m.p. treated portionwise with 0.22 g. P2S5 and the product extracted with Et2O gave 0.3 g. 6-chloro-2-thiocoumarin (II), needles, m. 196° (50% EtOH). 6-Aminocoumarin (III) (0.65 g.) and 0.8 g. o-HOC6H4CO2H in 80 ml. Me2CO kept over night to give 1.05 g. III salicylate, needles, m. 108-10° (H2O). Coumarin-3-carboxylic acid (IV) (0.5 g.) in 40 ml. EtOH treated with 0.36 g. p-phenetidine to give 0.65 g. p-phenetidine coumarin-3-carboxylate, needles, m. 134-5° (C6H6). IV (9.5 g.) and 8 g. III in MeOH-Me2CO (1:1) concentrated and the product recrystd. from this solvent gave 12.5 g. III coumarin-3-carboxylate (V), needles, m. 145-7°. V (0.5 g.) in a sealed tube heated 2 hrs. at 190-200°, the product washed with Me2CO and recrystd. (CHCl3) gave 0.2 g. N-(6-coumarinyl)coumarin-3-carboxylate, needles, m. 296°. IV (1 g.) and 0.92 g. 4-methyl-7-aminocoumarin (VI) in Me2CO-EtOH (1:4) concentrated to give 1.7 g. 4-methyl-7-coumarinylamine coumarin-3-carboxylate, needles, m. 158-60°. 4-Hydroxycoumarin (VII) (1.3 g.) in 20 ml. EtOH and 0.7 g. vanillin in EtOH-H2O (2:3) refluxed 40 min. to give 0.3 g. 4-hydroxy-3-( $\alpha$ -hydroxy-3-methoxy-4-hydroxybenzyl)coumarin, m. 132° (EtOH). Hypothermic action of these compds. and derivs. were examined by a screening test on rats. 2-Thiocoumarin and II, a derivative of I which have comparatively strong effect, had only a weak effect. III.HCl had the strong effect but the action was not potentiated by converting it to a salicylate. Chromone-2-carboxylic acid had a weaker effect than chromone but did not have such strong toxicity as IV. Of the salts of IV with PhNH2, phenetidine, III, and VI, and acid amides with NH3, PhNH2, phenetidine, and III, the salt with III had the strongest action with longest duration of the effect. Of the halogenated coumarins, those with Cl in 3- and 6-position had a strong activity, while introduction of a Me in 4-position weakened the activity. In the derivs. of VII condensed with aldehyde at 3-position, the vanillin condensate had the strongest effect, while those formed by condensation with chloral hydrate and antipyrine-4-aldehyde had effect similar to that of VII.

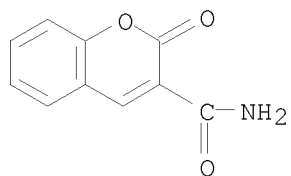
IT 1846-78-2, Coumarin, 3-carbamoyl- 4527-55-3,  
Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]- 54396-25-7, Coumarin,  
3-phenylcarbamoyl- 109502-88-7, Coumarin,  
3-(2-oxo-2H-1-benzopyran-6-ylcarbamoyl)-  
(hypothermal action of)

RN 1846-78-2 CAPLUS

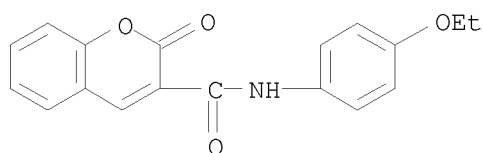
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)



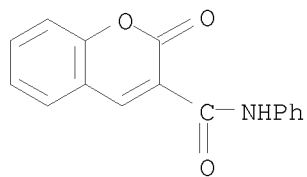
10/513699



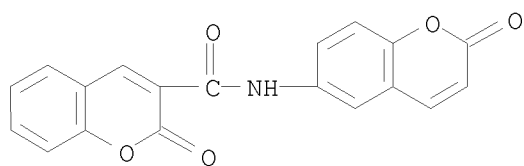
RN 4527-55-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 109502-88-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-oxo-2H-1-benzopyran-6-yl)- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L9 ANSWER 348 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1958:77138 CAPLUS

DOCUMENT NUMBER: 52:77138

ORIGINAL REFERENCE NO.: 52:13675f-h

TITLE: Condensation of o-, m-, and  
p-chloromalonanilic acids with aldehydes. II. With  
o- and p-methoxybenzaldehydes and  
m-methylbenzaldehyde

AUTHOR(S): George, M. V.; Ittyerah, P. I.

CORPORATE SOURCE: St. Johns Coll., Agra, India

SOURCE: Agra Univ. J. Research (1955), 4(Pt. 2),  
555-8

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

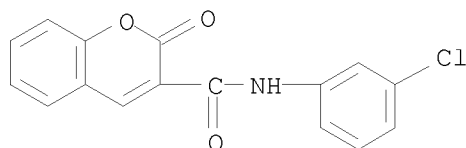
AB The condensations were carried out in the same way and the same types of  
products were obtained as described in the preceding abstract except no  
coumarin derivs. were obtained. The following condensation products were  
obtained [aldehyde and m.p. and % yield of the o-, m-, and  
p-chloromalonanilic acids (the corresponding chlorocinnamanilide in  
parentheses) given]: o-MeOC<sub>6</sub>H<sub>4</sub>CHO, 184.5° (decomposition), 70.8  
(126°, 89), 232° (decomposition), 70.8 (127°, 89.1),  
225° (decomposition), 74 (182°, 96.5); p-MeOC<sub>6</sub>H<sub>4</sub>CHO, 206°  
(decomposition), 70.8 (157°, 96.5), 198° (decomposition) 64.4  
(131°, 89.1), 208.5° (decomposition), 64.4 (176°, 96.5);  
m-MeC<sub>6</sub>H<sub>4</sub>CHO, 187° (decomposition), 74.4 (104°, 90.4), 177°  
(decomposition), 67.6 (-, -), 202° (decomposition), 88 (176°, 90.4).

IT 1847-01-4P, Coumarin, 3-[[m-chlorophenyl]carbamoyl]-  
1847-02-5P, Coumarin, 3-[[p-chlorophenyl]carbamoyl]-  
74556-29-9P, Coumarin, 3-[[o-chlorophenyl]carbamoyl]-  
RL: PREP (Preparation)

(preparation of)

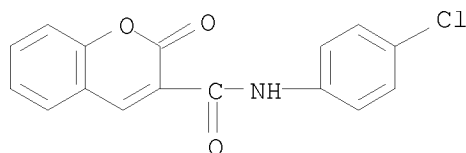
RN 1847-01-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-chlorophenyl)-2-oxo- (CA INDEX NAME)



RN 1847-02-5 CAPLUS

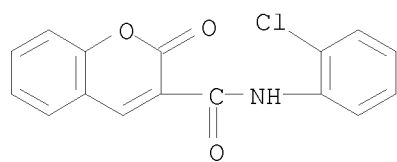
CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



RN 74556-29-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-2-oxo- (CA INDEX NAME)

10/513699



<12/04/2007>

Erich Leese

L9 ANSWER 349 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1958:77137 CAPLUS

DOCUMENT NUMBER: 52:77137

ORIGINAL REFERENCE NO.: 52:13675b-f

TITLE: Condensation of o-, m-, and p-chloromalonanilic acids with aldehydes. I. With benzaldehyde and o-, m-, and p-hydroxybenzaldehydes

AUTHOR(S): George, M. V.; Ittyerah, P. I.

CORPORATE SOURCE: St. Johns Coll., Agra, India

SOURCE: Agra Univ. J. Research (1955), 4(Pt. 2), 551-4

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

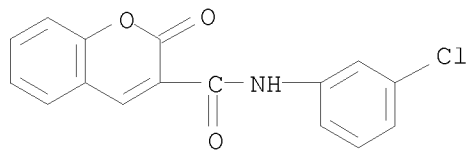
AB Chloromalonanilic acids were condensed with PhCHO or o-, m-, or p-HOC6H4CHO to give arylidene chloromalonanilic acids (uncatalyzed condensation or HOAc catalyst) or chlorocinnamanilides (organic base catalyzed condensation). m-HOC6H4CHO gave higher yields of condensation product than the o- or p-isomers. o-HOC6H4CHO gave a coumarin derivative. Thus, equimolar amts. of the acid and aldehyde were mixed, catalyst (1 molar proportion of HOAc or 0.15 of organic bases) added, and the mixture heated 4 hrs. on an H2O bath. The acid products were extracted with aqueous NaHCO3 while the nonacidic products were purified by recrystn. from EtOH or Me2CO. The NaHCO3 extract was acidified and the solids recrystd. from EtOH or Me2CO. Condensation with o-HOC6H4CHO yielded no NaHCO3 extract. The residue was extracted with hot EtOH to remove (2-hydroxybenzal)chloroanilines (deep yellow or orange), and then recrystd. from HOAc to give the coumarin. The following X-benzylidene-Y-chloroanilic acids were prepared (X, Y, m.p., and % yield given); -, o, 189° (decomposition), 92; -, m, 197.5° (decomposition), 70; -, p, 225° (decomposition), 81; m-OH, o, 189° (decomposition), -; m-OH, m, 192° (decomposition), -; m-OH, p, 221° (decomposition), -; p-OH, o, 205° (decomposition), -; p-OH, m, 202° (decomposition), -; p-OH, p, 226° (decomposition), -; The following Y-chloro-X-cinnamanilides were prepared (X, Y, m.p., and % yield given); -, o, 138°, 99; -, m, 120°, 90; -, p, 185.5°, 97; m-OH, o, 173°, -; m-OH, m, 190°, -; m-OH, p, 208°, -; p-OH, o, 184.5°, -; p-OH, m, 200°, -; p-OH, p, 223°, -. The (2-hydroxybenzal)-o-, m-, and p-chloroanilines m. 86°, 95°, and 106°, resp. The coumarin-3-carboxy-o-, m-, and p-chloroanilides m. 230°, 240°, and 250°, resp.

IT 1847-01-4P, Coumarin, 3-[[m-chlorophenyl]carbamoyl]-  
1847-02-5P, Coumarin, 3-[[p-chlorophenyl]carbamoyl]-  
74556-29-9P, Coumarin, 3-[[o-chlorophenyl]carbamoyl]-  
RL: PREP (Preparation)

(preparation of)

RN 1847-01-4 CAPLUS

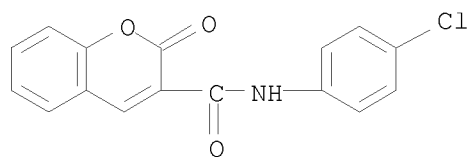
CN 2H-1-Benzopyran-3-carboxamide, N-(3-chlorophenyl)-2-oxo- (CA INDEX NAME)



10/513699

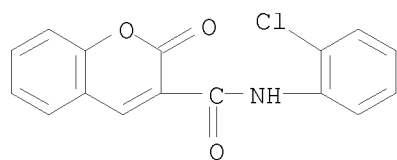
RN 1847-02-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-chlorophenyl)-2-oxo- (CA INDEX NAME)



RN 74556-29-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(2-chlorophenyl)-2-oxo- (CA INDEX NAME)



L9 ANSWER 350 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1958:15774 CAPLUS

DOCUMENT NUMBER: 52:15774

ORIGINAL REFERENCE NO.: 52:2848b-h

TITLE: Synthesis of various 3-substituted-4-alkylcoumarins

AUTHOR(S): Wiener, Charles; Schroeder, Collin H.; Link, Karl Paul

CORPORATE SOURCE: Univ. of Wisconsin, Madison

SOURCE: Journal of the American Chemical Society (1957

), 79, 5301-3

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 52:15774

AB  $\alpha$ -HOC<sub>6</sub>H<sub>4</sub>COEt (75 g.) and 62.1 g. NCCH<sub>2</sub>CO<sub>2</sub>Et refluxed with 100 cc. C<sub>6</sub>H<sub>6</sub> and 35 cc. glacial AcOH, treated with 0.5 g. NH<sub>4</sub>OAc, refluxed 80 hrs. while adding 30.8 g. NH<sub>4</sub>OAc periodically in 0.5-g. portions, cooled, and washed with an equal volume H<sub>2</sub>O, the C<sub>6</sub>H<sub>6</sub> layer concentrated in vacuo, and the residual orange paste recrystd. (with C) from the min. volume 95% EtOH gave 74.6 g. 3-cyano-4-ethylcoumarin, m. 139-40°. Similarly were prepared the following 3-cyano-4-alkylcoumarins (alkyl, m.p., and % yield given): Pr, 130-1°, 65; Bu, 98-9°, 68; Am, 94-6°, 70; C<sub>6</sub>H<sub>13</sub>, 105-7°, 54; C<sub>7</sub>H<sub>15</sub>, 83-5°, 42; C<sub>8</sub>H<sub>17</sub>, 91-2°, 40. The appropriate I (10 g.) treated slowly with stirring with 40 cc. concentrated H<sub>2</sub>SO<sub>4</sub>, the solution heated to 80-90°, treated with 0.5 cc. fuming H<sub>2</sub>SO<sub>4</sub>, kept 1 hr. at 80-90°, poured carefully into ice-water mixture, and filtered, and the residue recrystd. from hot aqueous EtOH yielded the corresponding 3-carbamoyl-4-alkylcoumarin (II): Et, 220-2°, 97; Pr, 185-6°, 93; Bu, 165-6°, 98; Am, 157-8°, 96; C<sub>6</sub>H<sub>13</sub>, 163-5°, 92; C<sub>7</sub>H<sub>15</sub>, 148-9°, 95; C<sub>8</sub>H<sub>17</sub>, 115-16°, 93. The appropriate II (5 g.) refluxed 1 hr. in 150 cc. 5% aqueous NaOH, cooled, filtered, poured onto crushed ice, acidified, and allowed to stand 20 min., and the precipitate filtered and recrystd. from hot aqueous EtOH gave the corresponding 3-carboxy-4-alkylcoumarins (III): Et, 165-6°, 75; Pr, 145-6°, 73; Bu, 134-5°, 63. The appropriate II (alkyl = Am to C<sub>8</sub>H<sub>17</sub>) (2 g.) refluxed 2 hrs. with 100 cc. 5% aqueous NaOH, cooled, filtered, poured onto crushed ice, acidified, and extracted with Et<sub>2</sub>O, the extract treated with C and reextd. with 100 cc. 3% aqueous NaHCO<sub>3</sub>, the aqueous extract acidified with excess HCl and extracted with Et<sub>2</sub>O, the extract dried and evaporated, the residual viscous material dissolved in 3 cc. hot C<sub>6</sub>H<sub>6</sub>, and the solution diluted with hot Skellysolve B to incipient turbidity and kept 12 hrs. at 0° deposited the corresponding III: Am, 93-6°, 85; C<sub>6</sub>H<sub>13</sub>, 85-8°, 65; C<sub>7</sub>H<sub>15</sub>, 84-6°, 70; C<sub>8</sub>H<sub>17</sub>, 85-7°, 43. The appropriate III (1 g.) refluxed 0.5 hr. in 5 cc. SOCl<sub>2</sub> and evaporated in vacuo, the residue dissolved in hot C<sub>6</sub>H<sub>6</sub>, diluted with hot Skellysolve B to incipient turbidity, and cooled 2 hrs., and the product filtered and recrystd. from C<sub>6</sub>H<sub>6</sub>-Skellysolve B gave the corresponding 3-chloroformyl-4-alkylcoumarins (IV): Et, 115-16°, 94; Pr, 124-6°, 82; Bu, 120-2°, 97; Am, 105-9°, 95; C<sub>6</sub>H<sub>13</sub>, 60-3°, 82; C<sub>7</sub>H<sub>15</sub>, 73-4°, 50; C<sub>8</sub>H<sub>17</sub>, 55-6°, 61. The appropriate IV (2 g.) refluxed 0.5 hr. in 15 cc. absolute EtOH containing 3 drops pyridine, concentrated to about 3 cc. in vacuo, and kept 12 hrs. at 0°, and the crystalline deposit recrystd. from C<sub>6</sub>H<sub>6</sub>-Skellysolve B gave the corresponding 3-carbethoxy-4-alkylcoumarin (V): Et, 50-2°, 85; Pr, 61-3°, 71; Bu, 48-9°, 75; Am, 65-8°, 62; C<sub>6</sub>H<sub>13</sub>,

10/513699

40-1°, 47. The appropriate V (R = C<sub>7</sub>H<sub>15</sub> and C<sub>8</sub>H<sub>17</sub>) (10 g.) refluxed 1 hr. in 75 cc. absolute EtOH containing 0.5 cc. pyridine and evaporated in

vacuo, and the residual oil distilled gave the corresponding V (alkyl, b.p./mm., m.p., and % yield given): C<sub>7</sub>H<sub>15</sub>, 217°/0.7, 13-14°, 70; C<sub>8</sub>H<sub>17</sub>, 201°/0.5, 8-10°, 85.

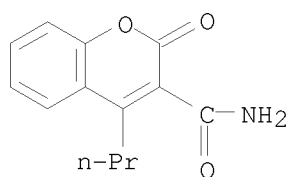
IT 100393-61-1P, Coumarin, 3-carbamoyl-4-propyl-  
100711-10-2P, Coumarin, 4-butyl-3-carbamoyl-  
100956-21-6P, Coumarin, 3-carbamoyl-4-pentyl-  
101287-33-6P, Coumarin, 3-carbamoyl-4-hexyl-  
101582-64-3P, Coumarin, 3-carbamoyl-4-heptyl-  
101782-12-1P, Coumarin, 3-carbamoyl-4-octyl-  
104116-68-9P, Coumarin, 3-carbamoyl-4-ethyl-

RL: PREP (Preparation)

(preparation of)

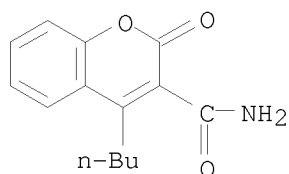
RN 100393-61-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-4-propyl- (CA INDEX NAME)



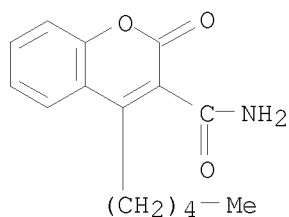
RN 100711-10-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-butyl-2-oxo- (CA INDEX NAME)



RN 100956-21-6 CAPLUS

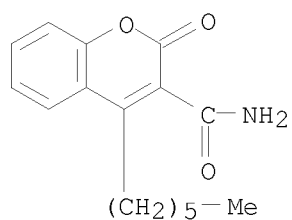
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-4-pentyl- (CA INDEX NAME)



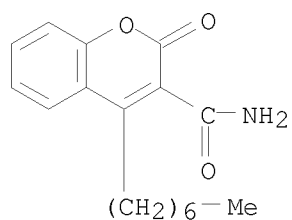
RN 101287-33-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-hexyl-2-oxo- (CA INDEX NAME)

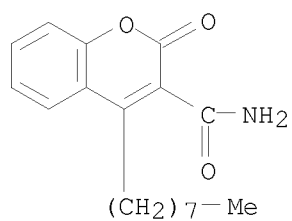
10/513699



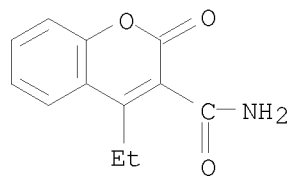
RN 101582-64-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 4-heptyl-2-oxo- (CA INDEX NAME)



RN 101782-12-1 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 4-octyl-2-oxo- (CA INDEX NAME)



RN 104116-68-9 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 4-ethyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS  
RECORD (12 CITINGS)



10/513699

L9 ANSWER 351 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:86480 CAPLUS

DOCUMENT NUMBER: 51:86480

ORIGINAL REFERENCE NO.: 51:15699h-i,15700a

TITLE: Synthetic compounds active against  
Salmonella-dysentery group bacilli

AUTHOR(S): Akiya, Shichiro

CORPORATE SOURCE: Univ. Tokyo

SOURCE: Japanese Journal of Experimental Medicine (

1956), 26, 91-112

DOCUMENT TYPE: Journal

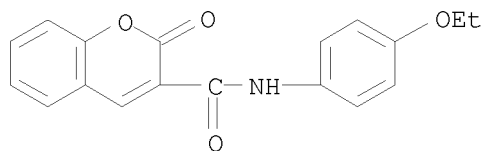
LANGUAGE: Unavailable

AB Synthetic organic compds. (1028) were tested for their in vitro antibacterial activities against *Micrococcus pyogenes* var. *aureus*, *Escherichia coli* Number 1, *Shigella dysenteriae* Ewing I, *Shigella paradysenteriae* 2a, *Salmonella typhosa* S 57, *S. paratyphi* A 1015, and *S. enteritidis* 5168. Of these compds. 436 were effective at 10-4M against at least one of the organisms. Active compds. comprised hydrazone derivative of 5-nitrofurfural, benzoquinone and naphthoquinone derivs., alkyl and acyl resorcinols, N-containing heteroarom. quaternary bases, aminodibenzofurans, hydrazones of pyridine derivs., aromatic aldazines, tricarbonylmethane derivs., and others.

IT 4527-55-3, Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]-  
(bactericidal action of)

RN 4527-55-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

L9 ANSWER 352 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:71456 CAPLUS

DOCUMENT NUMBER: 51:71456

ORIGINAL REFERENCE NO.: 51:12895e-i

TITLE: New 3-acyl coumarins

AUTHOR(S): Buu-Hoi, Ng. Ph.; Loc, T. B.; Xuong, Ng. D.

CORPORATE SOURCE: Univ. Paris

SOURCE: Bulletin de la Societe Chimique de France (1957) 561-3

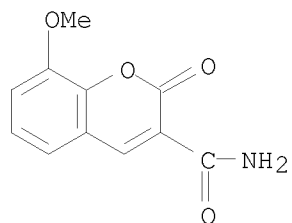
CODEN: BSCFAS; ISSN: 0037-8968

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

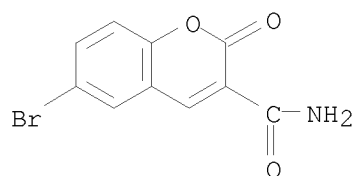
- AB Some new 3-acyl coumarins were prepared in order to study their sedative and antimitotic properties which will be reported in a later communication. The following coumarins were prepared by Knoevenagel condensations using piperidine as the base: 6-Br, 3-Ac, m. 223°, from 5-bromosalicylaldehyde and Et acetoacetate (I); 6,8-Br<sub>2</sub>, 3-Ac, m. 219°, from 3,5-dibromosalicylaldehyde and I; 6,8-Cl<sub>2</sub>, 3-Ac, m. 177°, from 3,5-dichlorosalicylaldehyde and I; 8-MeO, 3-Ac, m. 174°, from o-vanillin and I; 6-Cl 3-n-butyryl, m. 156°, from 5-chlorosalicylaldehyde and Et n-butyrylacetate (II); 6-Br, 3-n-butyryl, m. 167°, from 5-bromosalicylaldehyde and II; 6,8-Cl<sub>2</sub>, 3-n-butyryl, m. 165°, from 3,5-dichlorosalicylaldehyde and II; 6,8-Br<sub>2</sub>, 3-n-butyryl, m. 196°, from 3,5-dibromosalicylaldehyde and II; 6,8-I<sub>2</sub>, 3-n-butyryl, m. 216°, from 3,5-diiodosalicylaldehyde and II; 6-benzyl-3-n-butyryl, m. 134°, from 5-benzyl-salicylaldehyde and II; 8-MeO, 3-n-butyryl, m. 119°, from o-vanillin and II; 8-MeO, 3-(o-chlorobenzoyl), m. 144°, from o-vanillin and Et o-ClC<sub>6</sub>H<sub>4</sub>COCH<sub>2</sub>CO<sub>2</sub>Et; 8-MeO, 3-(2-thenoyl), m. 173°, from o-vanillin and Et 2-thenoyl acetate (III); 7-HO, 3-(2-thenoyl), m. 268°, from resorcyaldehyde and III; 6-Cl, 3-(2-thenoyl) m. 197° from 5-chlorosalicylaldehyde and III; 6-Br, 3-2-(thenoyl), m. 204°, from 5-bromosalicylaldehyde and III; 6,8-Cl<sub>2</sub>, 3-(2-thenoyl), m. 207°, from 3,5-dichlorosalicylaldehyde and III; 6,8-Br<sub>2</sub>, 3-(2-thenoyl), m. 220° from 3,5-dibromosalicylaldehyde and III; 6,8-I<sub>2</sub>, 3-(2-thenoyl), m. 256°, from 3,5-diiodosalicylaldehyde and III; 6-benzyl-3-(2-thenoyl), m. 141°, from 5-benzylsalicylaldehyde and III. Further, the following carboxycoumarins and their esters and amides were prepared by Knoevenagel condensations: 8-MeO, 3-CO<sub>2</sub>H, m. 212°, from o-vanillin and di-Et malonate (IV) followed by saponification, 6-Br, 3-CO<sub>2</sub>Et, m. 166°, from 5-bromosalicylaldehyde and IV (acid, m. 198°; amide, m. 218°); 6,8-Cl<sub>2</sub>, 3-CO<sub>2</sub>Et, m. 181°, from 3,5-dichlorosalicylaldehyde and IV (acid, m. 209°; amide, m. 248°); 6,8-Br<sub>2</sub>, 3-CO<sub>2</sub>Et, m. 169°, from 3,5-dibromosalicylaldehyde and IV (acid, m. 223° amide, m. 276°).
- IT 1728-88-7P, Coumarin, 3-carbamoyl-8-methoxy-  
38472-56-9P, Coumarin, 6-bromo-3-carbamoyl-  
RL: PREP (Preparation)  
(preparation of)
- RN 1728-88-7 CAPLUS
- CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo- (CA INDEX NAME)

10/513699



RN 38472-56-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 7

THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

L9 ANSWER 353 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:39261 CAPLUS

DOCUMENT NUMBER: 51:39261

ORIGINAL REFERENCE NO.: 51:7375f-i, 7376a-c

TITLE: Heterocyclic derivatives of 5-benzylsalicylaldehydes

AUTHOR(S): Buu-Hoi, Ng. Ph.; Loc, T. B.; Xuong, Ng. D.

CORPORATE SOURCE: Univ. Paris

SOURCE: Bulletin de la Societe Chimique de France (1956) 1650-3

CODEN: BSCFAS; ISSN: 0037-8968

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 50, 14627f. Readily synthesized 5-benzylsalicylaldehydes are convenient intermediates for the preparation of benzyl substituted heterocyclic compds. similar to well-established biologically active substances. Benzylation of o-HOC<sub>6</sub>H<sub>4</sub>CHO with p-EtC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Cl and p-iso-PrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Cl gave 2,5-HO(p-EtC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>)C<sub>6</sub>H<sub>3</sub>CHO (I) [thiosemicarbazone, m. 230°; isonicotinoylhydrazone, m. 164° (from MeOH)] and 2,5-HO(p-iso-PrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>)C<sub>6</sub>H<sub>3</sub>CHO (II). Condensation of 5.5 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> and 5 g. 2,5-HO(PhCH<sub>2</sub>)C<sub>6</sub>H<sub>3</sub>CHO (III) at room temperature with 4-5 drops piperidine and crystallization from MeOH gave 7 g. Et 6-benzylcoumarin-3-carboxylate, m. 101°; acid (IV), m. 148°; amide, m. 178°. Decarboxylation of IV by heating several min., distillation of the residue in vacuo, and crystallization from alc. yielded 60% 6-benzylcoumarin, m. 110°. Similarly, 6-(p-chlorobenzyl)coumarin, m. 129°, was prepared from 6-(p-chlorobenzyl)coumarin-3-carboxylic acid; amide, m. 222°. Condensation of I and II with CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> and saponification of the esters produced gave 6-(p-ethylbenzyl)coumarin-3-carboxylic acid, m. 186° (Et ester, m. 104°), and 6-(p-isopropylbenzyl)coumarin-3-carboxylic acid, m. 204°. Under the same conditions 2,3,5-HO(MeO)(PhCH<sub>2</sub>)C<sub>6</sub>H<sub>2</sub>CHO produced 6-benzyl-8-methoxycoumarin-3-carboxylic acid, m. 170°; Et ester, m. 103°; amide, m. 214°. Condensation of 4 g. III and 4 g. AcCH<sub>2</sub>CO<sub>2</sub>Et with 4-5 drops piperidine at room temperature several days and recrystn. from MeOH gave 3 g. 3-acetyl-6-benzylcoumarin, m. 145°. PhCH<sub>2</sub>CN (1.2 g.) and 2.3 g. III in warm MeOH were stirred with 3-4 drops 25% aqueous NaOH and the mixture was kept 12 hrs. at room temperature, and crystallized from MeOH to give 3.2 g. α-phenyl-β-(5-benzyl-2-methoxyphenyl)acrylonitrile (V), m. 67°. The corresponding α-p-chlorophenyl and α-p-bromophenyl (VI) compds., m. 111° and 116°, resp., were similarly prepared. Refluxing 5 g. V (or VI) and 25 g. pyridine-HCl, cooling the mixture and adding dilute HCl, boiling for several min., filtering off, and recrystg. from alc. gave 2.8 g. 6-benzyl-3-phenylcoumarin, m. 125°, and 6-benzyl-3-(p-bromophenyl)coumarin, m. 165°. III (5 g.) in alc. containing 1.2 g. KOH was refluxed 1 hr. with 2.3 g. ClCH<sub>2</sub>COMe, the alc. evaporated, the residue treated with H<sub>2</sub>O, the oily product distilled in vacuo, and the distillate recrystd. from alc. to give 3 g. 2-acetyl-5-benzylcoumarone, m. 100°, characterized by the Pfitzinger reaction with isatin yielding 2-(5-benzyl-2-coumaronyl)cinchoninic acid, m. 252°. By the Doebner reaction, 10 g. III, 7 g. β-C<sub>10</sub>H<sub>7</sub>NH<sub>2</sub>, and 4.5 g. AcCO<sub>2</sub>H in ice-cold alc. were refluxed several min., the mixture chilled and the precipitate (14 g.) crystallized from AcOH yielding 2-(3-benzyl-4-hydroxyphenyl)-1-azaphenanthrene-

10/513699

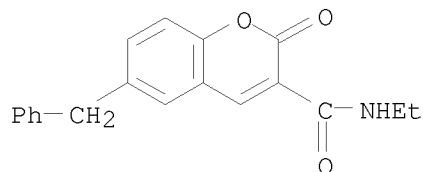
4-carboxylic acid, m. 251°, converted by fusing and crystallizing the cooled melt from alc. to the corresponding  
2-(3-benzyl-4-hydroxyphenyl)-1-azaphenanthrene, m. 204°.

IT 1082668-10-7P 1082673-39-9P

RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)  
(Heterocyclic derivatives of 5-benzylsalicylaldehydes)

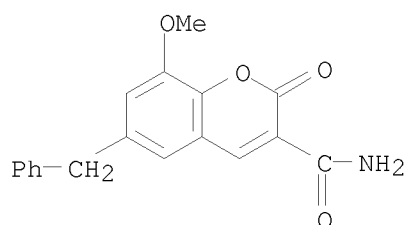
RN 1082668-10-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-ethyl-2-oxo-6-(phenylmethyl)- (CA INDEX NAME)



RN 1082673-39-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo-6-(phenylmethyl)- (CA INDEX NAME)



IT 101576-27-6P, Coumarin, 3-carbamoyl-6-p-chlorobenzyl-

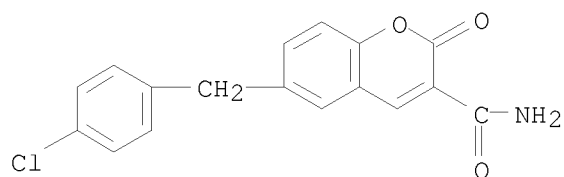
101600-79-7P, Coumarin, 6-benzyl-3-carbamoyl-

102237-80-9P, Coumarin, 3-carbamoyl-6-p-isopropylbenzyl-

RL: PREP (Preparation)  
(preparation of)

RN 101576-27-6 CAPLUS

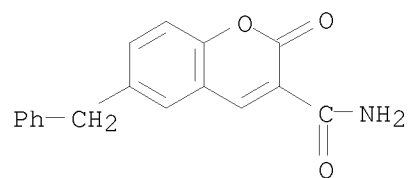
CN 2H-1-Benzopyran-3-carboxamide, 6-[(4-chlorophenyl)methyl]-2-oxo- (CA INDEX NAME)



RN 101600-79-7 CAPLUS

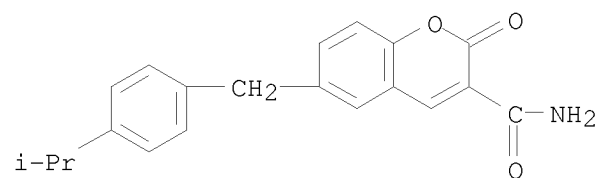
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-6-(phenylmethyl)- (CA INDEX NAME)

10/513699



RN 102237-80-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-[[4-(1-methylethyl)phenyl]methyl]-2-oxo-  
(CA INDEX NAME)

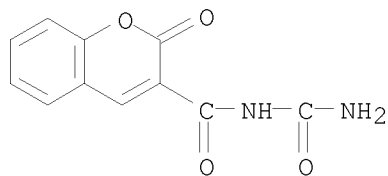


10/513699

L9 ANSWER 354 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:14311 CAPLUS  
DOCUMENT NUMBER: 51:14311  
ORIGINAL REFERENCE NO.: 51:3059a-b  
TITLE: Sugar sirups from fruit  
PATENT ASSIGNEE(S): Unipektin A.-G.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

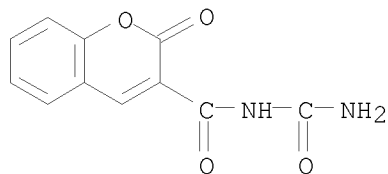
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	CH 306361		19550616	CH	<--
AB	In an example, pear juice containing 8-10% sugar was adjusted to a pH of 9.5 with Ca(OH) <sub>2</sub> , filtered, and then processed through 4 further filtering steps. From the 1st filter containing a sulfo-substituted polystyrene cation-exchange resin (I) a dark-brown solution (pH 2.5) was obtained. The next filter (containing a PhOH-HCHO-polyamine anion-exchange resin) gave a basic yellow solution. A 3rd filter containing a strong basic-salt-splitting anion-exchange resin yielded a colorless and odorless product. Another filter containing I gave a pure clear solution (pH 6-7). The product was dried in vacuo to approx. 40° B.acte.e.				
IT	95876-97-4				
	(Derived from data in the 6th Collective Formula Index (1957-1961))				
RN	95876-97-4	CAPLUS			
CN	2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-2-oxo- (CA INDEX NAME)				



10/513699

L9 ANSWER 355 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1957:14310 CAPLUS  
DOCUMENT NUMBER: 51:14310  
ORIGINAL REFERENCE NO.: 51:3058i,3059a  
TITLE: Meat-curing salt compositions  
INVENTOR(S): Hall, Lloyd A.; Kalchbrenner, Walter S.  
PATENT ASSIGNEE(S): Griffith Laboratories, Inc.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE -----
	US 2770551		19561113	US 1955-519616	19550701 <--
AB	An alkali metal citrate is used as I. The crystals remain free-flowing and noncaking for at least 3.5 months.				
IT	95876-97-4 (Derived from data in the 6th Collective Formula Index (1957-1961))				
RN	95876-97-4 CAPLUS				
CN	2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-2-oxo- (CA INDEX NAME)				

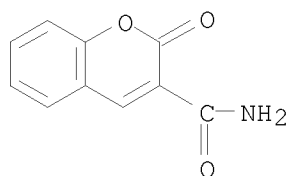




10/513699

L9 ANSWER 356 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1957:14307 CAPLUS  
DOCUMENT NUMBER: 51:14307  
ORIGINAL REFERENCE NO.: 51:3058f-h  
TITLE: Meat-curing salt compositions  
INVENTOR(S): Hall, Lloyd A.; Kalchbrenner, Walter S.  
PATENT ASSIGNEE(S): Griffith Laboratories, Inc.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	US 2770548		19561113	US 1955-519615	19550701 <--
AB	Free-flowing, noncaking, meat-curing salts which form nonturbid pickling brines contain: (1) a major portion of NaCl crystals containing as heart-like centers a minor portion of an alkali metal nitrite or nitrate (cf. C.A. 48, 10954e); (2) a small amount of a hygroscopic agent, (3) 2-5% (calculated as Na3PO4.H2O) buffer, and (4) at least 1% (calculated as Na citrate dihydrate) of a sequestering agent (I). For example, a heated solution with a pH >7.4, composed of 173 lb. NaNO2, 116 lb. NaNO3, 2288 lb. 10 oz. NaCl, 4 oz. Na tripolyphosphate, 14 lb. glycerol, 139 lb., 2 oz. Na3PO4.H2O, 41 lb. 4 oz. Na citrate dihydrate, and 900 gal. water, was heated and flash-dried on drums heated to 310-30°F. Powdery crystals were scraped from the drums, cooled, and packed in 300-lb. containers. After 7 months' storage the crystals were free-flowing and dissolved (even in hard water) to form nonturbid meat-pickling brine.				
IT	1846-78-2				
	(Derived from data in the 6th Collective Formula Index (1957-1961))				
RN	1846-78-2	CAPLUS			
CN	2H-1-Benzopyran-3-carboxamide, 2-oxo-			(CA INDEX NAME)	

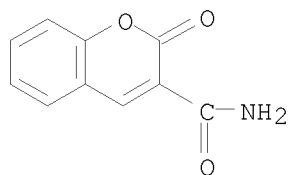


OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

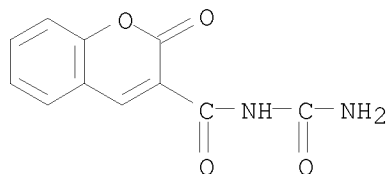
10/513699

L9 ANSWER 357 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1957:14306 CAPLUS  
DOCUMENT NUMBER: 51:14306  
ORIGINAL REFERENCE NO.: 51:3058e-f  
TITLE: Stabilization of soft roe of fish  
INVENTOR(S): Benard, Lucette  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

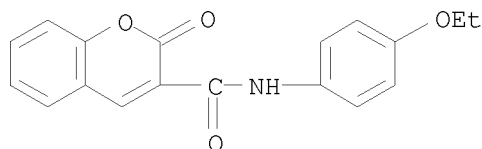
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	FR 999215		19520129	FR	<--
AB	The comminuted soft roe is treated with a water-miscible solvent for oil, e.g. Me2CO. The mixture is then filtered, the oil-free and deodorized dry residue thus obtained being dried and comminuted for storage and the filtrate being separated by distillation to obtain the oil. Preferably, 3 parts				
	Me2CO are used per 1 part soft roe. The solid residue is preferably dried in vacuo, the yields being oil 20, water 40, and dry matter 40%.				
IT	1846-78-2				
	(Derived from data in the 6th Collective Formula Index (1957-1961))				
RN	1846-78-2	CAPLUS			
CN	2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)				



L9 ANSWER 358 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1956:56896 CAPLUS  
 DOCUMENT NUMBER: 50:56896  
 ORIGINAL REFERENCE NO.: 50:10715h-i,10716a  
 TITLE: Syntheses of coumarin derivatives. VIII. Sedative and hypnotic activities of coumarin-3-carboxylic acid derivatives  
 AUTHOR(S): Ichibagase, Hisashi  
 CORPORATE SOURCE: Univ. Nagasaki  
 SOURCE: Yakugaku Zasshi (1955), 75, 1486-9  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB Soporific and sedative actions and toxicity of 25 kinds of coumarin-3-carboxylic acid derivs. were examined Esters showed some efficacy and the effect is stronger in alkyl esters (XVIII) than in Ph esters. In XVIII, the activity became weaker with the increase in the size of the alkyl group and in the same alkyl group, the normal were weaker than the iso derivs. Compds. -CONHR (R = aromatic residue or ureido group) were ineffective and devoid of toxicity. III, XII, and XI showed loss of efficacy and toxicity. VIII, XIV, and XV also showed loss of sedative and soporific activities but not of toxicity, which appeared gradually over a few days.  
 IT 95876-97-4, Coumarin, 3-allophanoyl-  
 (sedative and hypnotic activity of)  
 RN 95876-97-4 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-2-oxo- (CA INDEX NAME)

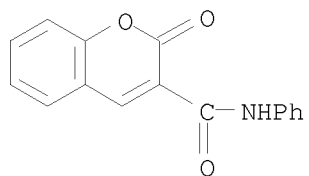


IT 4527-55-3, Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]-  
 54396-25-7, Coumarin, 3-phenylcarbamoyl- 111947-24-1,  
 Benzoic acid, p-(2-oxo-2H-1-benzopyran-3-carboxamido)-, ethyl ester  
 301818-26-8, Coumarin, 6-nitro-3-phenylcarbamoyl-  
 873999-66-7, Coumarin, 3-allophanoyl-6-nitro-  
 (sedative and hypnotic activity of)  
 RN 4527-55-3 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



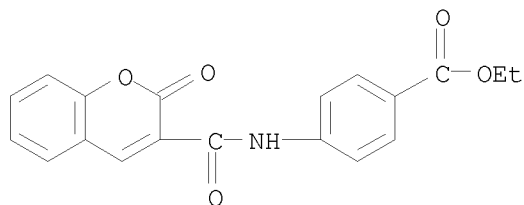
RN 54396-25-7 CAPLUS  
 CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)

10/513699



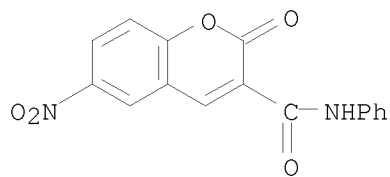
RN 111947-24-1 CAPLUS

CN Benzoic acid, 4-[[2-oxo-2H-1-benzopyran-3-yl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)



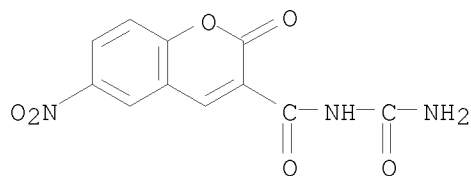
RN 301818-26-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-phenyl- (CA INDEX NAME)



RN 873999-66-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-6-nitro-2-oxo- (CA INDEX NAME)



L9 ANSWER 359 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1956:4695 CAPLUS

DOCUMENT NUMBER: 50:4695

ORIGINAL REFERENCE NO.: 50:966i,967a-h

TITLE: Some derivatives of 3-imino-5-oxopyrazolidine and of cyanoacetylhydrazine

AUTHOR(S): Papini, Piero; Checchi, Silvio; Ridi, Mario

CORPORATE SOURCE: Univ. Florence

SOURCE: Gazzetta Chimica Italiana (1954), 84, 769-80

CODEN: GCITA9; ISSN: 0016-5603

DOCUMENT TYPE: Journal

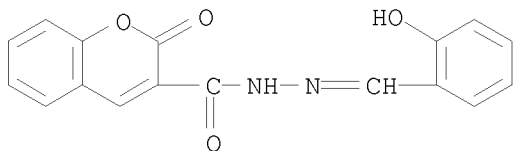
LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Continuing expts. on derivs. of NCCH<sub>2</sub>CONHNH<sub>2</sub> (I), 3-imino-5-oxopyrazolidine (II), and 1-phenyl-3,5-dioxopyrazolidine (cf. C.A. 49, 6917f), an attempt was made to synthesize 3-imino-4-anilinomethylene-5-oxopyrazolidine directly from I and PhN:CHNPh (III), but the reaction went otherwise. I and III (equimolar amts.) in AcOH refluxed 1-2 h., evaporated, and the product purified by EtOH, give 4-phenyl-3-cyanomethyl-1,2,4-triazole (IV), m. 157°. The reaction is very similar to the general reaction of Pellizzari (C.A. 5, 3806). By the same reaction, I and p-EtOC<sub>6</sub>H<sub>4</sub>N:CHNC<sub>6</sub>H<sub>4</sub>OEt-p (V) give 4-p-phenethyl-2-cyanomethyl-1,2,4-triazole, m. 192°. III and H<sub>2</sub>NNHCHO (VI) (equimolar amts.), heated 5 h. at 150°, and taken up in boiling dilute NaOH, give 4-phenyl-1,2,4-triazole. V and VI (equimolar amts.), heated 5 h. at 170°, give 4-p-phenethyl-1,2,4-triazole, m. 122-5°. Aqueous I and ClCO<sub>2</sub>Et (equimolar amts.), let stand several hrs., give NCCH<sub>2</sub>CONHNHCO<sub>2</sub>Et, m. 98-100°, which hydrolyzes to EtOH, CO<sub>2</sub>, and pyrazolidine (VII). VII (0.5 g.), 0.5 g. ClCO<sub>2</sub>Et, and 5 cc. N NaOH, agitated several hrs., give (from EtOH) Et 3-imino-5-oxo-4-pyrazolidinecarboxylate, m. 155-60° (decomposition). Aqueous VI and alloxan (VIII) (equimol. wts.), refluxed 1 h., give (from water) HN:C.NH.NH.CO.CHC(OH).CO.NH.CO.NH.CO, burns without fusing. This reaction is analogous to that of VII with pyrazoles [cf. Pellizzari, Gazz. chim. ital. 18, 340(1888); Ann. chim. (Rome) [9], 4(1899)]. Aqueous isatin and 2 mol of pyrazolidine, boiled, give 3,3-bis(3-imino-5-oxopyrazolidin-4-yl)-oxindole, burns without fusing. Alc. VII and 3-4 mol Ac<sub>2</sub>CH<sub>2</sub> refluxed 1 h., or heated at 160°, give 5-oxo-4',6'-dimethylpyridino[2',3'-3,4]pyrazolidine, m. 215-17°. Alc. VII and o-HOC<sub>6</sub>H<sub>4</sub>CHO (IX) (equimolar amts.), refluxed briefly, and let stand, give (from EtOH) 4-salicylidene-3-imino-5-oxopyrazolidine, yellow, m. 199-200°. Alc. VII and IX (2 mol), refluxed 30 min., gives (from dioxane) a disalicylidene derivative, probably o-HOC<sub>6</sub>H<sub>4</sub>CH:NC:N.NH.CO.C:CHC<sub>6</sub>H<sub>4</sub>OH-o, orange-yellow, turns canary-yellow around 140°, browns at 210-20°, decompose above 245°; its solns. in boiling aqueous NaOH cooled, and HCl added, precipitate disalicylidenehydrazide (X). VII and 3-4 mol IX, heated at 160° until H<sub>2</sub>O is no longer evolved, give (from EtOH) a trisalicylidene derivative, C<sub>24</sub>H<sub>17</sub>O<sub>4</sub>N<sub>3</sub>, yellow, m. 238-9°; its structure is uncertain. Alc. I (2 g.) and 12 g. IX, refluxed 20 min., give (from dioxane) o-HOC<sub>6</sub>H<sub>4</sub>CH:NNHCOC(CN):CHC<sub>6</sub>H<sub>4</sub>OH-o (XI), m. 210-12° (decomposition); with boiling dilute NaOH it forms X. XI (1 g.) and 30 cc. dilute HCl, refluxed until precipitation is complete, give (from dioxane) o-C<sub>6</sub>H<sub>4</sub>.O.CO.C(CONHN:CHC<sub>6</sub>H<sub>4</sub>OH-o):CH, m. 288-90°; with boiling dilute NaOH it forms X. I (1 g.) and 6 g. IX, heated at 140-50° (energetic reaction), give (from EtOH) trisalicylideneacyanoacetylhydrazine, yellow, m. 239-41°, also

formed from 0.5 g. XI and 3 g. IX at 150°; its structure is uncertain. In boiling dilute NaOH it forms X. I (1 g.) and 0.5 g. Ac<sub>2</sub>CH<sub>2</sub> in 100 cc. H<sub>2</sub>O, refluxed or heated at 160° and concentrated, give (from EtOH) (NCCH<sub>2</sub>CONH)<sub>2</sub> (XII), m. 192-3° [cf. Rothenburg, Ber. 27, 687(1894)]. Alc. I (2 g.) and 1 g. Ac<sub>2</sub>CH<sub>2</sub> refluxed 30 min., and concentrated, give acetylacetone bis(cyanoacetylhydrazone) (XIII), m. 176-8°. Without EtOH, at 100-40°, a mixture of XII and XIII is obtained. I and AcCH<sub>2</sub>CH<sub>2</sub>Ac (equal wts.), heated at 100° give (from EtOH) acetonylacetone bis(cyanoacetylhydrazone), m. 192-3°; in hot AcOH it forms an unidentified compound, C<sub>9</sub>H<sub>11</sub>ON<sub>3</sub>, m. 158-9°, formed by elimination of one mol. of I and closing of a pentat. or hexat. nucleus. I (2 g.) and 3.2 g. BzCH<sub>2</sub>Ac, heated 30 min. at 120°, give (from Et<sub>2</sub>O) benzoylacetone cyanoacetylhydrazone, m. 125-8°.

IT 30866-42-3P, 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
salicylidenehydrazone  
RL: PREP (Preparation)  
(preparation of)  
RN 30866-42-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxylic acid, 2-oxo-,  
2-[(2-hydroxyphenyl)methylene]hydrazone (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 360 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1956:1503 CAPLUS

DOCUMENT NUMBER: 50:1503

ORIGINAL REFERENCE NO.: 50:323e-i

TITLE: Benzopyrones. Coumarins derived from o-vanillin

AUTHOR(S): Cingolani, Enrico

CORPORATE SOURCE: Ist. super. sanita, Rome

SOURCE: Gazzetta Chimica Italiana (1954), 84, 843-52

CODEN: GCITA9; ISSN: 0016-5603

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB 2,3-HO(MeO)C<sub>6</sub>H<sub>3</sub>CHO (I) (0.04 mole), 0.043 mole CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub>, and 0.04 mole PhNH<sub>2</sub>, let stand in 5 cc. EtOH 1 day, 30 cc. H<sub>2</sub>O and 8 cc. concentrated HCl added, heated on a steam bath 1 hr., collected and crystallized gave 98% 8-methoxycoumarin-3-carboxylic acid (II); chloride, m. 181° (from C<sub>6</sub>H<sub>6</sub>); amide, m. 254°. II was obtained in trace yields from 0.01 mole I, 0.01 mole CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub>, and 2 drops PhNH<sub>2</sub> in 4 cc. pyridine at 30°, the main product, m. 163°, lacked N. I with NCCH<sub>2</sub>CO<sub>2</sub>Na in alc.-H<sub>2</sub>O or alkaline solution with PhNH<sub>2</sub> gave trans-2,3-HO-(MeO)C<sub>6</sub>H<sub>3</sub>CH:C(CN)CO<sub>2</sub>H (III), which gave II by warming in H<sub>2</sub>O. I and CH<sub>2</sub>(CN)<sub>2</sub> gave 3-cyano-8-methoxycoumarin (IV) together with some 2,3-HO(MeO)C<sub>6</sub>H<sub>3</sub>CH:C(CN)<sub>2</sub>. IV was also obtained from I and NCCH<sub>2</sub>CO<sub>2</sub>Et in piperidine with or without alc. as solvent. IV, stirred in 5% NaOH, hydrolysed to II. III with Me<sub>2</sub>SO<sub>4</sub> in alkaline solution gave 2,3-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH:C(CO<sub>2</sub>H)CN (V). A mixture of 0.5 g. V and 2.5 g. pyridine-HCl refluxed 15 min., diluted, and acidified with HCl, extracted twice with Et<sub>2</sub>O, the H<sub>2</sub>O solution saturated with NaCl and extracted with Et<sub>2</sub>O, the exts.

combined, dried, and evaporated gave 8-hydroxycoumarin (VI), m. 156° (from alc.-H<sub>2</sub>O); also obtained by refluxing 0.5 g. II with 2.5 g. pyridine-HCl 30 min. 8-Methoxycoumarin was obtained by adding 25 cc. 25% NaHSO<sub>3</sub> solution to 2 g. II, warming until dissolved, adding 10 cc. concentrated H<sub>2</sub>SO<sub>4</sub> and heating 1 hr., pouring the hot solution into ice, and filtering, after standing overnight. The cis- $\alpha$ -cyano-2-hydroxycinnamic acids were not isolable but were formed as the Et esters by condensing o-HOC<sub>6</sub>H<sub>4</sub>CHO with NCCH<sub>2</sub>CO<sub>2</sub>Et; lactonization gave 3-cyanocoumarin.

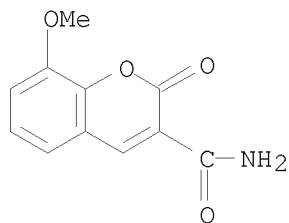
IT 1728-88-7P, Coumarin, 3-carbamoyl-8-methoxy-

RL: PREP (Preparation)

(preparation of)

RN 1728-88-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 8-methoxy-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L9 ANSWER 361 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1955:84072 CAPLUS

DOCUMENT NUMBER: 49:84072

ORIGINAL REFERENCE NO.: 49:15790g-i,15791a-b

TITLE: Condensation of aromatic aldehydes with malonic-1,3,4-xylidic acid. III. With halogen and nitro substituted salicylaldehydes

AUTHOR(S): Prakash, Sant; Ittyerah, P. I.

CORPORATE SOURCE: St. Johns' Coll., Agra

SOURCE: Agra Univ. J. Research (1954), 3, 481-8

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB 6-Chlorocoumarin-3-carboxy-1,3,4-xylidide (I) and 2-hydroxy-5-chlorobenzylidene-1,3,4-xylidine (II) obtained in 0.2 g. and 0.3 g. yield, resp., by treating 1.9 g. malon-1,3,4-xylidic acid (III) with 1.7 g. 5-chlorosalicylaldehyde at 100° for 4 hrs., extracted with NaHCO<sub>3</sub> and the residue washed with hot alc. gave I, m. 216°. Cooling the alc. washings, deposited II, m. 110° (from alc.), violet color with FeCl<sub>3</sub>. Repeating the above but using pyridine, yielded 0.8 g. I, and 0.4 g. II; with piperidine, yielded 0.4 g. I and 0.3 g. II. 6,8-dichlorocoumarin-1,3,4-xylidide (IV), m. 230° and 2-hydroxy-3,5-dichlorobenzal-1,3,4-xylidine (V), m. 110° was obtained in 0.2 g. and 0.3 g. yield, resp., by treating 1.2 g. III with 1.0 g. 3,5-dichlorosalicylaldehyde, and extraction in the same manner. Repeated with pyridine, yielded 0.8 g. IV and 0.5 g. V; with piperidine, there was resin formation. 6-Bromocoumarin-3-carboxy-1,3,4-xylidide (VI), m. 205° and 2-hydroxy-5-bromobenzal-1,3,4-xylidine (VII), m. 85° obtained in 0.9 g. and 0.5 g. yield, resp., by treating 2.2 g. III with 2 g. of 5-bromosalicylaldehyde and 2 drops of pyridine and extraction in the same manner. VI decolorized alkaline KMnO<sub>4</sub> and Br-H<sub>2</sub>O [bromo derivative,

m. 270°; Hg derivative, m. 230° (decompose)].

6,8-Dibromocoumarin-3-carboxy-1,3,4-xylidide (VIII), m. 225° and 2-hydroxy-3,5-dibromobenzal-1,3,4-xylidine (IX), m. 101° obtained in 1 g. and 0.7 g. yield, resp., by treating 2 g. III with 2 g.

3,5-dibromosalicylaldehyde and 2 drops pyridine.

6-Nitrocoumarin-3-carboxy-1,3,4-xylidide (X), m. 230° and 2-hydroxy-5-nitrobenzal-1,3,4-xylidine (XI), m. 167° was obtained by treating 2 g. III with 2 g. 5-nitrosalicylaldehyde and 2 drops of pyridine. When 3-nitrosalicylaldehyde was used instead of the 5-nitro compound, there was obtained 8-nitrocoumarin-3-carboxy-1,3,4-xylidide (XII), m. 255° and 2-hydroxy-3-nitrobenzal-1,3,4-xylidine (XIII).

IT 854903-16-5P

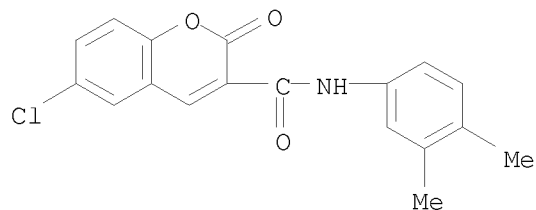
RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)  
(Condensation of aromatic aldehydes with malonic-1,3,4-xylidic acid.  
III. With halogen and nitro substituted salicylaldehydes)

RN 854903-16-5 CAPLUS

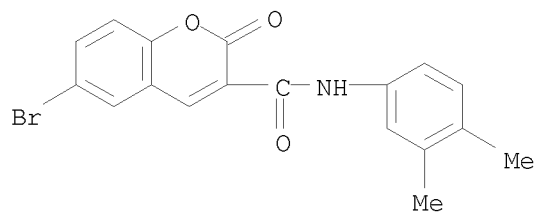
CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(3,4-dimethylphenyl)-2-oxo- (CA INDEX NAME)



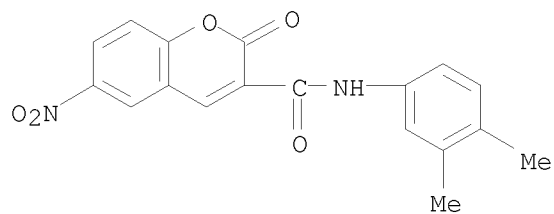
10/513699



IT 325807-55-4, Coumarin, 6-bromo-3-(3,4-xylylcarbamoyl)-  
(and derivs.)  
RN 325807-55-4 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(3,4-dimethylphenyl)-2-oxo- (CA  
INDEX NAME)

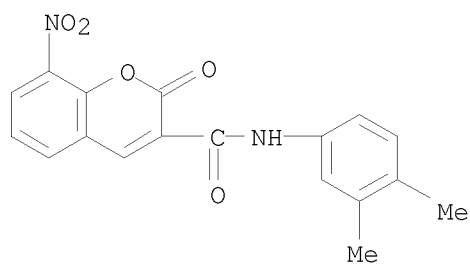


IT 326884-94-0P, Coumarin, 6-nitro-3-(3,4-xylylcarbamoyl)-  
854907-27-0P, Coumarin, 8-nitro-3-(3,4-xylylcarbamoyl)-  
RL: PREP (Preparation)  
(preparation of)  
RN 326884-94-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3,4-dimethylphenyl)-6-nitro-2-oxo- (CA  
INDEX NAME)



RN 854907-27-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(3,4-dimethylphenyl)-8-nitro-2-oxo- (CA  
INDEX NAME)

10/513699



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

<12/04/2007>

Erich Leese

L9 ANSWER 362 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1955:84071 CAPLUS

DOCUMENT NUMBER: 49:84071

ORIGINAL REFERENCE NO.: 49:15790d-g

TITLE: Condensation of aromatic aldehydes with malonic-1,3,4-xylydic acid. II. With o-,m-and p-hydroxybenzaldehydes, o-, m-, and p-methoxybenzaldehydes, piperonal, vanillin, veratraldehyde, and 5-bromovanillin

AUTHOR(S): Ghatak, S.; Prasad, Jwala; Ittyerah, P. I.

CORPORATE SOURCE: St. Johns' Coll., Agra

SOURCE: Agra Univ. J. Research (1954), 3, 489-92

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

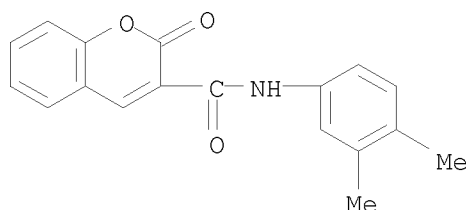
AB cf. C.A. 49, 933c. Malon-1,3,4-xylydic acid was condensed with the above mentioned aldehydes. A trace of pyridine or piperidine catalyzed the reaction; glacial AcOH was excellent for veratraldehyde. With the exception of m-MeOC<sub>6</sub>H<sub>4</sub>CHO, 3,4-MeO(HO)C<sub>6</sub>H<sub>3</sub>CHO and 5-bromovanillin which gave only the corresponding cinnam-1,3,4-xylylide, all other aldehydes gave 2 products each (1) the corresponding benzylidenemalon-1,3,4-xylydic acid and (2) the corresponding cinnam 1,3,4-xylylide. o-HOC<sub>6</sub>H<sub>4</sub>CHO gave coumarin-3-carboxy-1,3,4-xylylide, The general procedure consisted of mixing equimolar quantities of the acid and aldehyde using 0.15 mol of catalyst, heated 4 h., extracted with NaHCO<sub>3</sub>, the extract washed with Et<sub>2</sub>O, excess concentrated HCl added to precipitate acid, recrystd. from EtOH or Me<sub>2</sub>CO and the

residue from the alkaline extract recrystd. from EtOH. Thus were obtained the following (m.p., % yield given) derivative of benzylidenemalon-1,3,4-xylydic acid: m-HO, 200°, 50; p-HO, 223°, 50; o-MeO, 214°, 41.5; p-MeO, 222° 23; 3,4-methylenedioxy, 213, 22.5; 3,4-(MeO)<sub>2</sub>, 216°, 41.5. Also the following cinnam-1,3,4-xylylide: m-HO, 218°, 94.7; p-HO, 220°, 67.8; o-MeO, 152°, 95.7; m-MeO, 154° 71; p-MeO, 198° 3,4-methylenedioxy, 204° 49.1; 3,4-(MeO)<sub>2</sub>, 181° 81.5; 3,4-MeO(HO), 154°, 27.9; 3,4,5-MeO(HO)Br, 196° 16.5.

IT 304887-43-2P, Coumarin, 3-(3,4-xylylcarbamoyl)-  
854903-16-5P, Coumarin, 6-chloro-3-(3,4-xylylcarbamoyl)-  
RL: PREP (Preparation)  
(preparation of)

RN 304887-43-2 CAPLUS

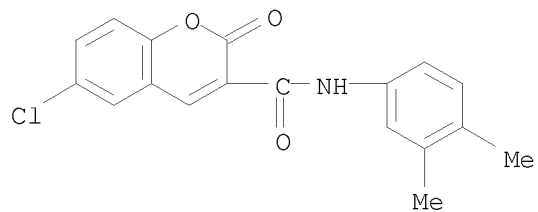
CN 2H-1-Benzopyran-3-carboxamide, N-(3,4-dimethylphenyl)-2-oxo- (CA INDEX NAME)



RN 854903-16-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-N-(3,4-dimethylphenyl)-2-oxo- (CA INDEX NAME)

10/513699



OS.CITING REF COUNT:

1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 363 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1955:53737 CAPLUS  
 DOCUMENT NUMBER: 49:53737  
 ORIGINAL REFERENCE NO.: 49:10378e-i,10379a-d  
 TITLE: Substituted coumarin-3-carboxylic acid and derivatives  
 INVENTOR(S): Schlesinger, Albert; Weiner, Nathan; Gordon, Samuel M.  
 PATENT ASSIGNEE(S): Endo Products, Inc.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2683720		19540713	US 1949-133212	19491215 <--

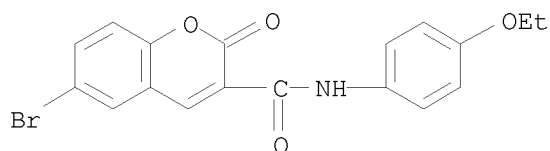
AB A series of compds. possessing activities as analgesics and central depressants were prepared 5,2-Br(HO)C<sub>6</sub>H<sub>3</sub>CHO (380 g., 1.9 mol) in 800 mL. 10% NaOH solution diluted with 1000 mL. H<sub>2</sub>O, the mixture warmed to 40°, the clear stirred solution treated with 1.25 l. freshly prepared CH<sub>2</sub>(CN)CO<sub>2</sub>Na solution (2.65 mol), the mixture heated 5 min. at 40°, left 12 h. at room temperature, acidified to Congo red with concentrated HCl, an addnl. 600 mL. 4% HCl added, the mixture of precipitated 5,2-Br(HO)C<sub>6</sub>H<sub>3</sub>CH:C(CN)CO<sub>2</sub>H which heated 2 h. at 75-85° and 2 min. at 95-100°, cooled, and the 6-bromocoumarin-3-carboxylic acid (I) filtered off, washed 3 times with 100 mL. cold H<sub>2</sub>O, 5 times with 60 mL. cold EtOH, and finally with 50 mL. Et<sub>2</sub>O gave 303 g. (60%) I, m. 200° (from EtOH). Also prepared were the following coumarin-3-carboxylic acids: 6,8-di-Br (II), m. 224-5° (from EtOH); 8-MeO (III), m. 215° (from Me<sub>2</sub>CO-H<sub>2</sub>O); 8-allyl (IV), m. 147° (from Me<sub>2</sub>CO-H<sub>2</sub>O); 6-nitro (V), m. 236° (from dioxane-H<sub>2</sub>O), prepared from coumarin-3-carboxylic acid with fuming HNO<sub>3</sub> in the cold; 6-diethylaminomethyl-8-methoxy (VI), m. 207.5° (from dioxane-H<sub>2</sub>O), prepared from III with Et<sub>2</sub>NH and HCHO in the cold; 6-piperidinomethyl-8-methoxy (VII), m. 236° (crystallized from 5% HCl and washed with Me<sub>2</sub>CO). Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH (5.85 g., 0.05 mol) in 100 mL. dry C<sub>6</sub>H<sub>6</sub> added quickly with stirring to 14.3 g. (0.05 mol) of the acid chloride of I suspended in 100 mL. dry C<sub>6</sub>H<sub>6</sub>, the mixture refluxed 4 h., cooled, and the precipitated I diethylaminoethyl ester HCl salt filtered off, washed with hexane, and dried in vacuo yielded 17.2 g. (85%) product, m. 215° (from EtOH). The free base, recrystd. from 50% Me<sub>2</sub>CO, m. 115°. Other ester HCl salts of I prepared were: Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>, m. 221° (from EtOH) [base, m. 105° (from 50% Me<sub>2</sub>CO)]; Bu<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>, m. 135° (from C<sub>6</sub>H<sub>6</sub> and C<sub>6</sub>H<sub>14</sub>) [base, m. 105° (from 50% Me<sub>2</sub>CO)]; (PhCH<sub>2</sub>)<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 197° (from 50% EtOH) [base, m. 145° (from Me<sub>2</sub>CO)]; (BuCH<sub>2</sub>CH<sub>2</sub>)N(CH<sub>2</sub>)<sub>2</sub>, m. 105° (from C<sub>6</sub>H<sub>6</sub>-C<sub>6</sub>H<sub>14</sub>); EtNH(CH<sub>2</sub>)<sub>2</sub>, m. 205.5° (from EtOH-H<sub>2</sub>O); BuNH(CH<sub>2</sub>)<sub>2</sub>, m. 183° (from EtOH). Ester HCl salts of II: Me<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 235° (from EtOH); Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 191° (from EtOH); Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>, m. 186.5° (from EtOH); Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>CH:CHCH<sub>2</sub>, m. 121° (from EtOH-Et<sub>2</sub>O); Bu<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 210° (from 50% EtOH) [base, m. 132.5° (from Me<sub>2</sub>CO.)]. Ester HCl salts of III: Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 198° (from EtOH); Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>, m. 181° (from EtOH); Bu<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 207.5° (from CHCl<sub>3</sub>-C<sub>6</sub>H<sub>14</sub>) [base, m. 127° (from Me<sub>2</sub>CO)]. Ester HCl salts of IV: Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 168° (from EtOH-Et<sub>2</sub>O); Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>, m. 153° (from EtOH-Et<sub>2</sub>O);

Bu<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 174° (from EtOH-Et<sub>2</sub>O). Ester HCl salts of V: Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 207° (from EtOH) [base, m. 122° (from 50% EtOH)]. 2-Morpholinoethyl ester HCl salts of I, m. 238° (from EtOH-Et<sub>2</sub>O) [base, m. 133.5° (from 50% Me<sub>2</sub>CO)]; I Et ester, m. 170° (from MeOH); VI Me ester, m. 217° (from Me<sub>2</sub>CO-H<sub>2</sub>O); VII Et ester, m. 231° (from Me<sub>2</sub>CO-H<sub>2</sub>O-Et<sub>2</sub>O); VII Bu ester, m. 216.5° (from Me<sub>2</sub>CO-H<sub>2</sub>O-Et<sub>2</sub>O). Ester HCl salts of VII: Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>, m. 215° (from 70% EtOH); Et<sub>2</sub>N(CH<sub>2</sub>)<sub>3</sub>, m. 225° (from 70% EtOH); β-2-piperidinoethyl, m. 212° (from 70% EtOH). Amides were prepared by treating 1 equivalent acid chloride with 2 equivs. amine in refluxing H<sub>2</sub>O. N-Substituted amides of I (substituents given): di-Et, m. 161° (from EtOH); allyl, m. 197° (from EtOH); p-EtOC<sub>6</sub>H<sub>4</sub>, m. 211° (from PhMe); di-Bu, m. 143° (from EtOH-H<sub>2</sub>O); di-PhCH<sub>2</sub>, m. 209° (from dioxane-H<sub>2</sub>O). Amides of II: di-Et, m. 174° (from EtOH); di-Bu, m. 142° (from EtOH-H<sub>2</sub>O); di-PhCH<sub>2</sub>, m. 188.5° (from dioxane-H<sub>2</sub>O). Amide of IV: di-Et, m. 92.5° (from MeOH). V (11.75 g., 0.05 mol) in 250 mL. dioxane hydrogenated in the presence of 0.2 g. 10% Pd-C catalyst at an initial pressure of 50 lb./sq. in. gave 9 g. (88%) 6-aminocoumarin-3-carboxylic acid (VIII), m. 205° (from C<sub>6</sub>H<sub>6</sub>-C<sub>6</sub>H<sub>14</sub>). Similarly, V Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub> ester-HCl gave VIII Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>-HCl, m. 210° (from 85% EtOH).

IT 4517-91-3P, Coumarin, 6-bromo-3-[(p-ethoxyphenyl)carbamoyl]-  
448915-49-9P, Coumarin, 3-(allylcarbamoyl)-6-bromo-  
RL: PREP (Preparation)  
(preparation of)

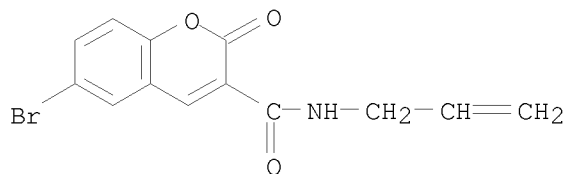
RN 4517-91-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



RN 448915-49-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-2-oxo-N-2-propen-1-yl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 364 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1955:11887 CAPLUS

DOCUMENT NUMBER: 49:11887

ORIGINAL REFERENCE NO.: 49:2375g-i, 2376a-c

TITLE: Condensation of aromatic aldehydes with malon-o-, m-, p-toluidic acids. I. With benzaldehyde, o-, m-, p-hydroxy- and -methoxybenzaldehydes

AUTHOR(S): Ittyerah, P. I.; Pandya, Kantilal C.

CORPORATE SOURCE: St. John's Coll., Agra

SOURCE: Journal of the Indian Chemical Society (1953), 30, 717-19

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. CA. 36, 1917.9. Equimol. quantities of RC6H4CHO (I) and R'C6H4NHCOCH2CO2H (II) (Chattaway and Olmsted, C.A. 4, 2288), heated 1-4 h. at 100°, the mixture extracted with concentrated NaHCO3, and the alkaline solution

acidified with concentrated HCl gave the RC6H4CH:C(CO2H)CONHC6H4R' (III). Recrystn. of the alkali-insol. residue from EtOH, Me2CO, or C6H6 gave small quantities of the RC6H4CH:CHCONHC6H4R' (IV). When the condensation was carried out in the presence of 0.15 mol C5H5N or piperidine as a catalyst, IV was the main product, together with small quantities of III. The following III were prepared (R, R', m.p., and % yield given): H, o-Me, 201°, 92.8; H, m-Me, 196, 74.7; H, p-Me, 228°, 78.3; m-HO, o-Me, 210°, 50.5; m-HO, m-Me, 181°, 53.8; m-HO, p-Me, 216°, 64; p-HO, o-Me, 227°, 20.2; p-HO, m-Me, 213°, 13.5; p-HO, p-Me, 160°, 27; o-MeO, o-Me, 212°, 41.8; o-MeO, m-Me, 231°, 70.7; o-MeO, p-Me, 223°, 57.9; m-MeO, o-Me, 185°, 57.9; m-MeO, m-Me, 172°, 64.3; m-MeO, p-Me, 171°, 64.3; p-MeO, o-Me, 217°, 96.5; p-MeO, m-Me, 203°, 57.9; p-MeO, p-Me, 205°, 45. The following IV were prepared (R, R', m.p., and % yield given): H, o-Me, 170°, 100; H, m-Me, 114°, 92.8; H, p-Me, 162°, 92.8; m-HO, o-Me, 210°, 79.5; m-HO, m-Me, 180°, 94.8; m-HO, p-Me, 209°, 94.8; p-HO, o-Me, 220°, 86.6; p-HO, m-Me, 205°, 79; p-HO, p-Me, 210°, 94.8; o-MeO, o-Me, 164°, 97.4; o-MeO, m-Me, 141°, 97.4; o-Me, p-Me, 177°, 97.4; m-MeO, o-Me, 117°, 89.8; m-MeO, m-Me, 108°, 97.4; m-MeO, p-Me, 107°, 74.9; p-MeO, o-Me, 177°, 97.4; p-MeO, m-Me, 108°, 97.4; p-MeO, p-Me, 158°, 97.4. I (R = o-HO) with II (R' = Me) give only the corresponding coumarin-3-carboxytoluidides as yellow crystalline compds. In this manner were obtained 43.1% coumarin-3-carboxy-o-toluidide, m. 226°; 32.3% m-toluidide, m. 202°; and 28.7% p-toluidide (V), m. 230°. I (R = o-HO) with II (R' = p-Me) in the presence of a trace of piperidine gave, in addition to V, N-(o-hydroxybenzylidene)-p-toluidine, orange crystals, m. 96°, giving a deep violet coloration with FeCl3. All other compds. prepared were white crystalline solids.

IT 1846-98-6P, Coumarin, 3-o-tolylcarbamoyl- 1846-99-7P  
 , Coumarin, 3-m-tolylcarbamoyl- 1847-00-3P, Coumarin,  
 3-p-tolylcarbamoyl-

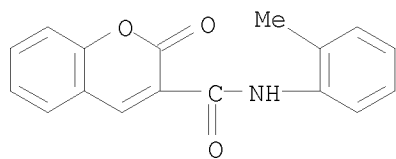
RL: PREP (Preparation)

(preparation of)

RN 1846-98-6 CAPLUS

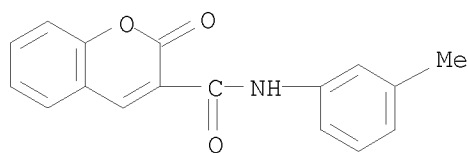
CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)

10/513699



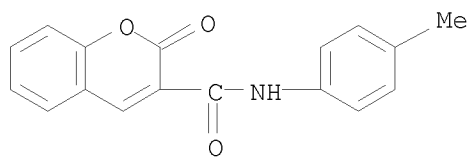
RN 1846-99-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 1847-00-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 5

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)



L9 ANSWER 365 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1954:25020 CAPLUS  
DOCUMENT NUMBER: 48:25020  
ORIGINAL REFERENCE NO.: 48:4525d-i, 4526a  
TITLE: The synthesis of some 3-substituted-4-methylcoumarins  
AUTHOR(S): Schroeder, Collin H.; Link, Karl Paul  
CORPORATE SOURCE: Univ. of Wisconsin, Madison  
SOURCE: Journal of the American Chemical Society (1953  
) , 75, 1886-8  
CODEN: JACSAT; ISSN: 0002-7863  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
OTHER SOURCE(S): CASREACT 48:25020

AB A series of 3-substituted-4-methylcoumarins has been synthesized by the NaOEt-catalyzed aldol condensation of o-HOC<sub>6</sub>H<sub>4</sub>Ac (I) and NCCH<sub>2</sub>CO<sub>2</sub>Et (II) to 3-cyano-4-methylcoumarin (III), followed by hydrolysis and further conversion of the resulting acid. An attempt to condense I with CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> failed. I (20 g.), 25 g. II, and 1 g. NaOEt in 200 cc. absolute EtOH refluxed 2 hrs., the mixture cooled, and the resulting crystalline product filtered off, washed with a small amount of cold EtOH, and recrystd. from Me<sub>2</sub>CO-H<sub>2</sub>O gave 26 g. (79%) III, m. 191-2°. III (13 g.) shaken 24 hrs. with 0.13 g. pyridine and 200 cc. 4% aqueous NaOH, the yellow solution acidified to pH 2 with 6N HCl, the precipitated crude material filtered off, extracted with two 25-cc. portions of 10% aqueous NaHCO<sub>3</sub>, the extract acidified with 12N HCl, and the precipitate recrystd. from dilute Me<sub>2</sub>CO gave 11.2 g. (78%) 3-carboxy-4-methylcoumarin (IV), m. 161-2°. IV (5.0 g.) and 6.0 g. PCl<sub>5</sub> in 70 cc. dry C<sub>6</sub>H<sub>6</sub> warmed 15 min. at 40°, the clear solution diluted with Skellysolve B to permanent turbidity, let stand 12 hrs. at 5°, and the crystallized deposit filtered off, washed with Skellysolve B, and recrystd. from Skellysolve B-C<sub>6</sub>H<sub>6</sub> gave 5.1 g. (93%) (4-methylcoumarin-3-yl)formyl chloride (V), m. 91-2°; SOCl<sub>2</sub> can be used equally well in this procedure. V (1 g.) refluxed 0.5 hr. in 10 cc. EtOH and the excess EtOH removed in vacuo gave 0.9 g. (91%) Et ester of IV, m. 95-6° (from aqueous EtOH). V (0.5 g.) heated with 10 cc. concentrated NH<sub>4</sub>OH until complete solution occurred gave 0.43 g. (93%) 3-carbamoyl-4-methylcoumarin (VI), m. 151-2° (from H<sub>2</sub>O). V (1 g.) added with vigorous stirring to 0.5 g. 4-hydroxycoumarin in 5 cc. dry pyridine at 0°, the mixture stirred 2 hrs. at room temperature, and the crude product filtered off, washed with cold EtOH, and recrystd. from xylene-Skellysolve B gave 1.2 g. (76%) 4-hydroxycoumarin ester of IV, m. 196-8°, which formed gels during the recrystn. VI (0.1 g.) heated 10 min. at about 70° in 1 cc. 6N H<sub>2</sub>SO<sub>4</sub> and the mixture diluted with 1 cc. H<sub>2</sub>O gave 0.08 g. IV, m. 161-2° (from aqueous Me<sub>2</sub>CO). III (1 g.) heated 1 hr. at about 160° with 20 cc. 85% H<sub>3</sub>PO<sub>4</sub> and 5 cc. 85% H<sub>2</sub>SO<sub>4</sub> and the mixture diluted with 100 cc. H<sub>2</sub>O gave 0.8 g. 4-methylcoumarin, needles, m. 81-3° (from H<sub>2</sub>O). To 20 cc. dry xylene and 0.5 g. Pd-BaSO<sub>4</sub> was added 2 g. V, the mixture refluxed 3 hrs. under a constant flow of H<sub>2</sub>, filtered through Filter-cel while hot, the filtrate concentrated, diluted with Skellysolve B to turbidity, and the resulting crystals dissolved in EtOH, decolorized with Darco G-60, and recrystd. several times from aqueous EtOH to give 40% 3-formyl-4-methylcoumarin (VII), m. 139-41°. VII (0.15 g.) and excess 2,4-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NHNH<sub>2</sub> reagent heated 0.5 hr. at about 78° gave 0.1 g. (99%) 2,4-dinitrophenylhydrazone of VII, orange crystals, m. 276-80° (from 95% EtOH). To 1 g. powdered KOH in 20 cc. CHCl<sub>3</sub> was added 1.0 g. V at room temperature, the mixture filtered after 3 hrs.,

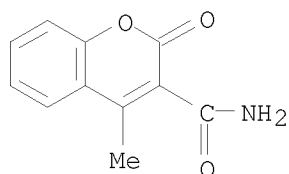
10/513699

and the  $\text{CHCl}_3$  evaporated in vacuo to give 0.6 g. (69%) anhydride of IV, m.  $180-2^\circ$  (from  $\text{C}_6\text{H}_6$ ).

IT 24526-68-9P, Coumarin, 3-carbamoyl-4-methyl-  
RL: PREP (Preparation)  
(preparation of)

RN 24526-68-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 4-methyl-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L9 ANSWER 366 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1954:18334 CAPLUS

DOCUMENT NUMBER: 48:18334

ORIGINAL REFERENCE NO.: 48:3356c-f

TITLE: Syntheses of coumarin derivatives. IV. Synthesis of coumarin- and 6-nitrocoumarin-3-carboxylic acid derivatives. 3

AUTHOR(S): Ichibagase, Hisashi; Terada, Seisuke

CORPORATE SOURCE: Univ. Nagasaki

SOURCE: Yakugaku Zasshi (1953), 73, 466-9

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

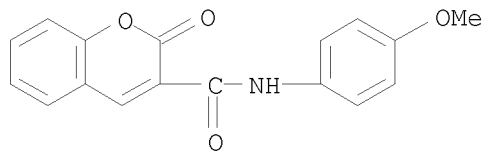
GI For diagram(s), see printed CA Issue.

AB cf. C.A. 47, 6413e. Coumarin-3-carboxylic acid (I) (3 g.) and 30 g. iso-AmOH treated 45 min. with cooling with dry HCl gas, the mixture boiled 30 min., cooled, poured into 5% Na<sub>2</sub>CO<sub>3</sub>, the upper layer poured into water, kept overnight, and the product recrystd. from iso-AmOH give 2.9 g. (71%) iso-Am coumarin-3-carboxylate, columns, m. 53.5-4°. 6-Nitrocoumarin-3-carboxylic acid (II) (2 g.) and 30 ml. MeOH treated 1 hr. with dry HCl gas with heating, cooled, poured into 400 ml. 5% Na<sub>2</sub>CO<sub>3</sub>, and the product recrystd. from C<sub>6</sub>H<sub>6</sub> give 1.8 g. (85%) Me ester of II, needles, m. 217-8°; similarly, II and EtOH yielded 91% Et ester, m. 198-8.5°. The acid chlorides of I and II (prepared from the acids with SOCl<sub>2</sub>) with bases in C<sub>6</sub>H<sub>6</sub> form C<sub>6</sub>H<sub>4</sub>.O.CO.C(COR):CH (III) and 6-O<sub>2</sub>NC<sub>6</sub>H<sub>3</sub>.O.CO.C(COR):CH (IV). Derivs. of III: R = PhNH (V), needles, m. 249-50°; p-MeOC<sub>6</sub>H<sub>4</sub>NH (VI), needles, m. 216-17°; p-EtOC<sub>6</sub>H<sub>4</sub>NH (VII), needles, m. 215°. Derivs. of IV: R = V, prisms, m. 290-1°; VI, needles, m. 269-70°; VII, needles, m. 243°. I or II in Me<sub>2</sub>CO or alc. with bases to form salts of I and II. II.PhNH<sub>2</sub>, needles, m. 265-6°; II.p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>OMe, needles, m. 241.5°; II.H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>OEt-p, needles, m. 228.5°; II.H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et-p, needles, m. 225.5°.

IT 1846-94-2P, Coumarin, 3-[(p-methoxyphenyl)carbamoyl]-  
 4487-68-7P, Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]-6-nitro-  
 4527-55-3P, Coumarin, 3-[(p-ethoxyphenyl)carbamoyl]-  
 54396-25-7P, Coumarin, 3-phenylcarbamoyl- 301818-26-8P  
 , Coumarin, 6-nitro-3-phenylcarbamoyl- 302815-26-5P, Coumarin,  
 3-[(p-methoxyphenyl)carbamoyl]-6-nitro-  
 RL: PREP (Preparation)  
 (preparation of)

RN 1846-94-2 CAPLUS

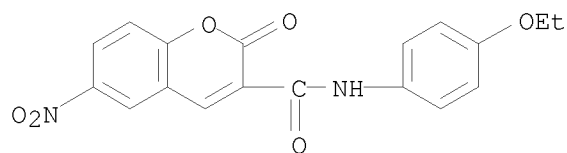
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



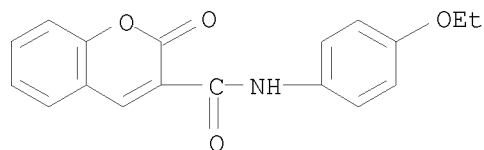
RN 4487-68-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-6-nitro-2-oxo- (CA INDEX NAME)

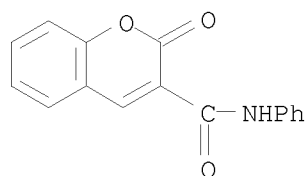
10/513699



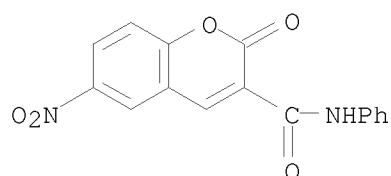
RN 4527-55-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-ethoxyphenyl)-2-oxo- (CA INDEX NAME)



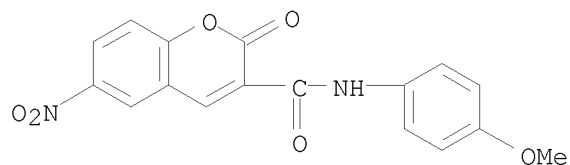
RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



RN 301818-26-8 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 6-nitro-2-oxo-N-phenyl- (CA INDEX NAME)



RN 302815-26-5 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-6-nitro-2-oxo- (CA INDEX NAME)



L9 ANSWER 367 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1953:37700 CAPLUS

DOCUMENT NUMBER: 47:37700

ORIGINAL REFERENCE NO.: 47:6413g-i,6414a

TITLE: Nuclear oxidation in flavones and related compounds.  
XXXV. Isomerization of 5,7,8-hydroxychromones into  
5,6,7-hydroxychromonesAUTHOR(S): Chakravorty, D. K.; Mukerjee, S. K.; Murty, V. V. S.;  
Seshadri, T. R.

CORPORATE SOURCE: Delhi Univ.

SOURCE: Proceedings - Indian Academy of Sciences, Section A (  
1952), 35A, 34-44

CODEN: PISAA7; ISSN: 0370-0089

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 46, 4537d. Methods of nuclear oxidation were applied to the preparation of chromone derivs., which were required for the study of isomeric change. Just as in the flavone group, the presence of a MeO (or HO) group in the 3-position prevents isomeric change from the 5,7,8- to the 5,6,7-arrangement of HO groups, in its absence the isomeric change takes place. The following 2-methylchromones are described:  
5,7,8-trihydroxy-3-methoxy (I), m. 242-4° (decomposition), from the 5,7-di-HO compound (II) and K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>; 3,7-dimethoxy-5-hydroxy (III), m. 121-2°, from II and Me<sub>2</sub>SO<sub>4</sub>; 3,7-dimethoxy-5,8-dihydroxy (IV), m. 216-18° (decomposition), from III and K<sub>2</sub>S<sub>2</sub>O<sub>8</sub> in pyridine and NaOH solution; 3,5,7,8-tetra-MeO (V), m. 158-9°, from I and Me<sub>2</sub>SO<sub>4</sub>; 3,5,7,8-tetrahydroxy (VI), decompose 270-3°, from I with HI in Ac<sub>2</sub>O, can be remethylated to V with Me<sub>2</sub>SO<sub>4</sub>; 7,8-dihydroxy-3-methoxy (VII), m. 208-9°, from 7-hydroxy-3-methoxy-2-methyl-4-oxo-1,4 H - benzopyran - 8 - carboxaldehyde in NaOH solution with H<sub>2</sub>O<sub>2</sub>; 3,7,8-trimethoxy, m. 112-13°, from VII and Me<sub>2</sub>SO<sub>4</sub>; 5,7,8-trimethoxy (VIII), m. 170-1°, by treatment with alc. H<sub>2</sub>SO<sub>4</sub> of  $\alpha$ -acetyl-2-hydroxy-3,4,6-trimethoxyacetophenone (IX), m. 122-4° (prepared from 2,3,4,6-HO(MeO)3C<sub>6</sub>HCOMe in AcOEt with powdered Na under Et<sub>2</sub>O); 5,6,7-trihydroxy (X), m. 284-6°, from VIII with HI in Ac<sub>2</sub>O; 5,6,7-trimethoxy (XI), m. 99-100°, by methylation of X. 2-Hydroxy-4,5,6-trimethoxy- $\alpha$ -acetylacetophenone (XII), m. 141-2°, from 2,4,5,6-HO(MeO)3C<sub>6</sub>HCOMe and Na in AcOEt, gives XI with H<sub>2</sub>SO<sub>4</sub>.

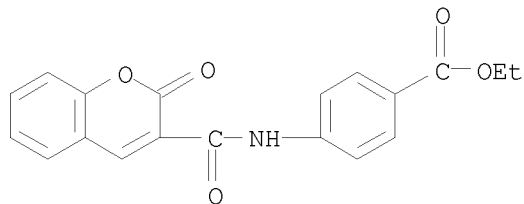
IT 111947-24-1P, Benzoic acid,  
p-(2-oxo-2H-1-benzopyran-3-carboxamido)-, ethyl ester

RL: PREP (Preparation)

(preparation of)

RN 111947-24-1 CAPLUS

CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl  
ester (CA INDEX NAME)



10/513699

<12/04/2007>

Erich Leese

L9 ANSWER 368 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1953:37699 CAPLUS

DOCUMENT NUMBER: 47:37699

ORIGINAL REFERENCE NO.: 47:6413e-g

TITLE: Syntheses of coumarin derivatives. III. Syntheses of 3-coumarincarboxylic and 6-nitro-3-coumarin-3-carboxylic acid derivatives. 2

AUTHOR(S): Ichibagase, Hisashi; Terada, Seisuke

CORPORATE SOURCE: Niigata Univ.

SOURCE: Yakugaku Zasshi (1952), 72, 1043-5

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

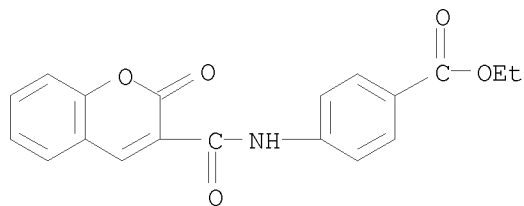
LANGUAGE: Unavailable

AB II (3 g.) in 30 g. PrOH treated with dry HCl gas 45 min. with cooling, boiled 30 min., cooled, the clear solution poured into 500 ml. 5% Na<sub>2</sub>CO<sub>3</sub>, and the product filtered, washed with water, dried, and recrystd. from PrOH give 3.3 g. (90%) Pr ester, columns, m. 71°. The iso-Pr, needles, m. 89.5°, and iso-Bu ester, plates, m. 76°, are prepared similarly with 87% and 82% yields, resp. III (2 g.) in the same way gives 5.3 g. (90%) Pr ester, needles, m. 165.5° (from C<sub>6</sub>H<sub>6</sub>); iso-Pr ester, needles, m. 217°; iso-Bu ester, needles, m. 187-8°. I (2.5 g.) and 20 ml. SOCl<sub>2</sub> give the acid chloride which is treated in 20 ml. C<sub>6</sub>H<sub>6</sub> with 4 g. p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et in 20 ml. C<sub>6</sub>H<sub>6</sub>, and the product filtered and recrystd. from Me<sub>2</sub>CO to give 4.2 g. (p-carbethoxyanilide) of I, plates, m. 248°; (p-carbethoxyanilide) of II, needles, m. 293-4°.

IT 111947-24-1P, Benzoic acid, p-(2-oxo-2H-1-benzopyran-3-carboxamido)-, ethyl ester  
RL: PREP (Preparation)  
(preparation of)

RN 111947-24-1 CAPLUS

CN Benzoic acid, 4-[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]-, ethyl ester (CA INDEX NAME)



L9 ANSWER 369 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1953:37697 CAPLUS

DOCUMENT NUMBER: 47:37697

ORIGINAL REFERENCE NO.: 47:6412f-i,6413a

TITLE: Syntheses of coumarin derivatives. I. Syntheses of 3-coumarincarboxylic and 6-nitro-3-coumarincarboxylic acid derivatives

AUTHOR(S): Ichibagase, Hisashi; Terada, Seisuke

CORPORATE SOURCE: Univ. Nagasaki

SOURCE: Yakugaku Zasshi (1952), 72, 876-7

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB o-HOC6H4CHO (I) (30 g.) and 25 g. CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub> mixed well, treated with 20 g. PhNH<sub>2</sub> dropwise, allowed to stand overnight, 250 mL. water and 60 mL. concentrated HCl added, the mixture heated on a water bath, filtered, and the product recrystd. from hot water give 25 g. 3-coumarincarboxylic acid (II), m. 190°. 2,5-HO(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>CHO (3 g.) and 1.8 g. CH<sub>2</sub>(CO<sub>2</sub>H)<sub>2</sub> in alc. treated with PhNH<sub>2</sub> dropwise, allowed to stand overnight, heated with 15 mL. water and 3 mL. concentrated HCl, filtered with C, and the product recrystd. from alc. give 0.5 g. 6-nitro-3-coumarincarboxylic acid (III), yellow needles, m. 190-204°. II (2 g.) in 30 g. BuOH treated 50 min. with dry HCl gas with cooling, boiled 30 min. until the solution becomes clear, cooled, poured into 500 mL. 5% Na<sub>2</sub>CO<sub>3</sub>, allowed to stand overnight, filtered, and the product washed with water, dried, and recrystd. front BuOH give 2.9 g. (74%) Bu ester (IV) of II, columns, m. 66-6.5°. Similarly, 5 g. III in 50 g. BuOH gives 5.5 g. (87%) Bu ester (V), of III, needles, m. 153-4°; 5 g. III in 55 g. iso-AmOH V gives 5.6 g. (85%) iso-Am ester, needles, m. 153-3.5°. II (2.5 g.) with 25 mL. SOCl<sub>2</sub> gives the acid chloride; adding 50 mL. C<sub>6</sub>H<sub>6</sub>, then 1.2 g. urea portion wise, heating on a water bath 1-2 h., cooling, filtering, washing with 2% Na<sub>2</sub>CO<sub>3</sub> and water, and recrystg. the product from alc. give 0.6 g. (coumarin-3-carbonyl)urea, needles, decompose 255-5.5°; 2.5 g. III and 25 mL. SOCl<sub>2</sub> gives its acid chloride, added 50 mL. C<sub>6</sub>H<sub>6</sub> and 1.2 g. urea portion wise and treating as above give 0.8 g. (6-nitrocoumarin-3-carbonyl)urea, yellow needles, decompose 243.5°.

IT 95876-97-4P, Urea, (2-oxo-2H-1-benzopyran-3-ylcarbonyl)-

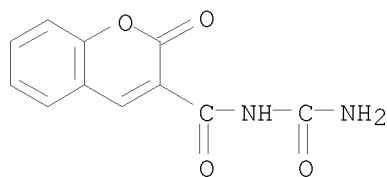
873999-66-7P, Coumarin, 3-allophanoyl-6-nitro-

RL: PREP (Preparation)

(preparation of)

RN 95876-97-4 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-2-oxo- (CA INDEX NAME)

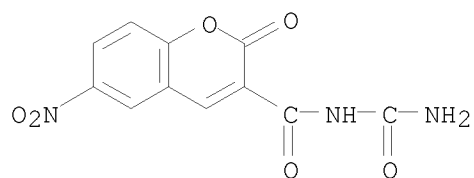


RN 873999-66-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(aminocarbonyl)-6-nitro-2-oxo- (CA INDEX NAME)



10/513699



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 370 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1950:56380 CAPLUS

DOCUMENT NUMBER: 44:56380

ORIGINAL REFERENCE NO.: 44:10705g-i,10706a-f

TITLE: Synthesis of rotenone and its derivatives. XVII.  
Rotenonone nucleus

AUTHOR(S): Parker, G.; Robertson, Alexander

CORPORATE SOURCE: Univ. of Liverpool, UK

SOURCE: Journal of the Chemical Society (1950)  
1121-4

CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 44, 1496d. 7-Methoxy-4-coumarin-carboxylic acid (I) (5 g.) and 4.73 g. PCl<sub>5</sub> in 60 ml. CHCl<sub>3</sub>, warmed 1.5 hrs. on the water bath, give the crude acid chloride (II) which, warmed 5 min. with PhNH<sub>2</sub>, gives the anilide, pale greenish yellow, m. 181°. II (10 g. I), 5 g. m-C<sub>6</sub>H<sub>4</sub>(OH)<sub>2</sub>, and 40 ml. PhNO<sub>2</sub>, treated with 7 g. AlCl<sub>3</sub>, kept 6 hrs. at 60°, and treated with 75 ml. H<sub>2</sub>O and 75 ml. concentrated HCl, give 6.7 g. 2', 4'-dihydroxy-7-methoxy-4-benzoylcoumarin (III), m. 237-8°, wine-red color with alc. FeCl<sub>3</sub> (diacetate, m. 88°). Prolonged boiling of III with alc.-HCl or alc.-H<sub>2</sub>SO<sub>4</sub> gives a small quantity of the Et ester of I; III could not be cyclized by AlCl<sub>3</sub> in PhNO<sub>2</sub>. 3-Coumarincarboxylic acid (IV) and PCl<sub>5</sub> in CHCl<sub>3</sub> give the acid chloride (V), m. 137°; 5 g. V, 2.5 g. PhOH, and 4.5 g. AlCl<sub>3</sub>, 2 days at room temperature, give 3.2 g. of the Ph ester of IV, m. 160°; p-tolyl ester, m. 159°. V (from 5 g. IV) and 2.8 g. m-C<sub>6</sub>H<sub>4</sub>(OH)<sub>2</sub> in 30 ml. PhNO<sub>2</sub>, treated with 3.6 g. AlCl<sub>3</sub>, kept 2 days at room temperature, and the product extracted with boiling EtOH, give 3.1 g. 2', 4'-dihydroxy-3-benzoylcoumarin (VI), yellow, m. 234° (decomposition), deep red FeCl<sub>3</sub> reaction in EtOH; the alc.-insol. residue (1.2 g.) is 7'-hydroxy-3, 4-dihydrochromanono-(3', 2', 3, 4)coumarin (VII), yellow, m. above 320°; the pale green solution in concentrated H<sub>2</sub>SO<sub>4</sub> has an intense green fluorescence; acetate, m. 230-1°; Me ether, pale yellow, m. 250°. The preparation of VI could not be repeated. VII (0.7 g.) in 100 ml. AcOH, treated with 1.1 g. Pb(OAc)<sub>4</sub> and kept 6 hrs. at 50-60° and 2 hrs. at 80°, gives 0.4 g. unchanged VII and 0.2 g. 7'-hydroxychromono(3', 2', -3, 4)coumarin, with 1 mol. H<sub>2</sub>O, orange-yellow, m. above 360°; acetate, m. 224° (decomposition). 7-Methoxy-3-coumarincarboxylic acid (VIII), through the acid chloride (IX), gives the anilide, pale green, m. 232°. IX (from 5 g. VIII), 2.7 g. m-C<sub>6</sub>H<sub>4</sub>(OH)<sub>2</sub>, and 4.5 g. AlCl<sub>3</sub> in 20 ml. PhNO<sub>2</sub>, 48 hrs. at room temperature, give the 7-MeO derivative of VII,

does

not m. at 300° (acetate, m. 167°). 3, 7-Di-methoxy-4-coumarincarboxylic acid (X), m. 212° (1.7 g. from 3 g. Et ester and H<sub>2</sub>SO<sub>4</sub>, refluxed 45 min.); through the acid chloride (XI), it gives the anilide, m. 191°. XI (from 3 g. X), 1.4 g. m-C<sub>6</sub>H<sub>4</sub>(OH)<sub>2</sub>, and 2 g. AlCl<sub>3</sub> in 20 ml. PhNO<sub>2</sub>, 7 hrs. at 70°, give 2.1 g. 2', 4'-dihydroxy-3, 7-dimethoxy-4-benzoylcoumarin (XII), bright yellow, m. above 300°, intense bottle-green FeCl<sub>3</sub> reaction in EtOH; diacetate, m. 264°. XII (1 g.), 20 ml. HBr, and 10 ml. AcOH, refluxed 2 hrs., give 0.45 g. 7, 7'-dihydroxy-chromono(2', 3', 3, 4)coumarin (XIII), pale yellow, m. 240°. XIII results in a small yield from the acid chloride of 3-chloro-7-methoxy-4-coumarincarboxylic acid and m-C<sub>6</sub>H<sub>4</sub>(OH)<sub>2</sub> with AlBr<sub>3</sub> in PhNO<sub>2</sub>.

IT 313954-47-1P, Herniarin, 3-phenylcarbamoyle-

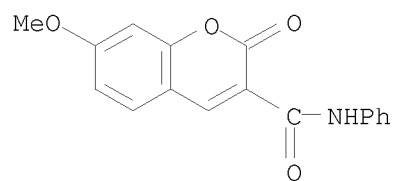
RL: PREP (Preparation)

10/513699

(preparation of)

RN 313954-47-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 7-methoxy-2-oxo-N-phenyl- (CA INDEX NAME)



10/513699

L9 ANSWER 371 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1950:55453 CAPLUS

DOCUMENT NUMBER: 44:55453

ORIGINAL REFERENCE NO.: 44:10519e-g

TITLE: Fluorescence of coumarin derivatives as a function of pH

AUTHOR(S): Goodwin, Richard H.; Kavanagh, Frederick

CORPORATE SOURCE: Connecticut Coll., New London

SOURCE: Archives of Biochemistry (1950), 27, 152-73

CODEN: ARBIAE; ISSN: 0096-9621

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB The color and relative intensity of the fluorescence of 98 coumarin derivs. are reported for H-ion concns. ranging, in pH, from -1.6 to 12.6, the 366-m $\mu$  Hg arc line being used to excite the fluorescence. The influence on fluorescence of OH, MeO, COOH, Ph, Me, and other substitutions at various positions on the coumarin mol. is presented and some of the uses of the pH-fluorescence curves are briefly discussed. The distinctness of the pH-fluorescence curve of scopoletin (7-hydroxy-6-methoxycoumarin) from that of any other coumarin reported here supports the hypothesis that the coumarin derivative isolated from Avena roots was scopoletin (C.A. 43, 7090e).

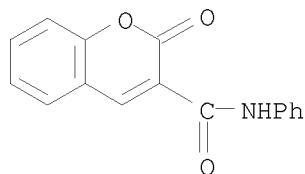
IT 54396-25-7P, Coumarin, 3-phenylcarbamoyl-

RL: PREP (Preparation)

(preparation of)

RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L9 ANSWER 372 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1950:24878 CAPLUS

DOCUMENT NUMBER: 44:24878

ORIGINAL REFERENCE NO.: 44:4875b-g

TITLE: Fluorescent reagents. Acyl chlorides and acyl hydrazides

AUTHOR(S): Baker, Wilson; Haksar, C. N.; McOmie, J. F. W.

CORPORATE SOURCE: Univ. Bristol, UK

SOURCE: Journal of the Chemical Society (1950) 170-3  
CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 44:24878

AB cf. C.A. 43, 7936e. The following 2-derivs. of 1-(o-hydroxybenzoyl)hydrazine were prepared by addition of 1 mol. of the CO compound to 1 mol. o-HOC<sub>6</sub>H<sub>4</sub>CONHNH<sub>2</sub> in warm EtOH; isopropylidene, m. 228°; piperonylidene, m. 270°; acetophenone o-hydroxybenzoylhydrazone, m. 212°; when adsorbed from EtOH on Al<sub>2</sub>O<sub>3</sub>, these derivs. exhibit a blue fluorescence in ultraviolet light. AcH and EtCHO did not form solid derivs. 2,5-HO(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>Me (1 g.) and 1 cc. 60% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in 20 cc. MeOH, refluxed 0.25 hr., give 5-nitrosalicyloyl hydrazide, with 1 mol. MeOH, yellow, m. 154° (decomposition). o-MeOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me (30 g.) and 26 cc. 60% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O, refluxed 2.25 hrs., give 60% o-anisoyl hydrazide, m. 85°; benzylidene derivative, m. 176°; isopropylidene derivative, m. 218°; these show a blue fluorescence in ultraviolet light. 3-Coumarincarboxylic acid (I) with SOCl<sub>2</sub> yields the chloride (II), m. 147°; p-toluidide, greenish yellow, m. 230°; morpholide, m. 92°. The Me and Et esters of I do not react with N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O at room temperature and in boiling EtOH they yield (o-HOC<sub>6</sub>H<sub>4</sub>CH:N)<sub>2</sub> (III) and CH<sub>2</sub>(CONHNH<sub>2</sub>)<sub>2</sub>; III resulted also from II and N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in various solvents. 7-Methoxy-4-methyl-3-coumarincarboxylic acid (IV) and SOCl<sub>2</sub> (refluxed 1 hr.) give the unstable chloride, m. 94-5° [not analyzed but characterized by formation of the Me (V) and Et esters]; IV and SO<sub>2</sub>Cl<sub>2</sub> (trace of Bz<sub>2</sub>O<sub>2</sub>) give 7-methoxy-4-chloromethyl-3-coumarincarbonyl chloride, m. 198°. V and 60% N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in 35 cc. MeOH give 55-60% of the hydrazide, pale yellow, m. 210°; benzylidene derivative, m. 250°; isopropylidene derivative, m. 237°; the derivs. are strongly fluorescent. 7-Hydroxy-4-coumarinacetic acid (preparation in 80% yield given) yields a Me ester, b. 220°; this could not be converted into a hydrazide. Me 7-methoxy-4-coumarinacetate gives 56% 7-methoxy-4-coumarinacetyl hydrazide, m. 206°; benzylidene derivative, m. 264°; ethylidene derivative, m. 194°; methylene derivative, m. 156°. (7-Methoxy-4-coumarinacetyl)hydrazones: PhAc, m. 215°; MeEtCO, m. 176°; AcCO<sub>2</sub>H, m. 220°; dihydroorcinol, m. 258° (decomposition); these are highly fluorescent. Expts. with disk chromatograms of Al<sub>2</sub>O<sub>3</sub> have shown the possibility of separating mixts. of the fluorescent esters and hydrazones described.

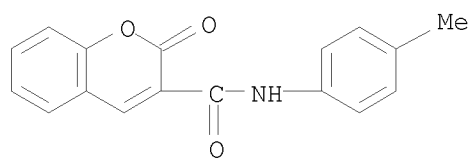
IT 1847-00-3P, Coumarin, 3-p-tolylcarbamoyle- 858213-64-6P  
, Hydrazine, 1-isopropylidene-2-(7-methoxy-4-methyl-2-oxo-2H-1-benzopyran-3-ylcarbonyl)-

RL: PREP (Preparation)  
(preparation of)

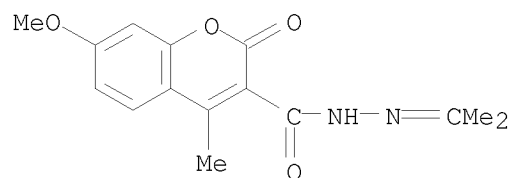
RN 1847-00-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(4-methylphenyl)-2-oxo- (CA INDEX NAME)

10/513699



RN 858213-64-6 CAPLUS  
CN INDEX NAME NOT YET ASSIGNED



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS  
RECORD (12 CITINGS)

L9 ANSWER 373 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1950:5514 CAPLUS

DOCUMENT NUMBER: 44:5514

ORIGINAL REFERENCE NO.: 44:1103g-i,1104a-i

TITLE: Coumarins. I. Derivatives of 3- and 4-coumarincarboxylic acids

AUTHOR(S): Clinton, R. O.; Laskowski, S. C.

SOURCE: Journal of the American Chemical Society (1949), 71, 3602-6  
CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 44:5514

GI For diagram(s), see printed CA Issue.

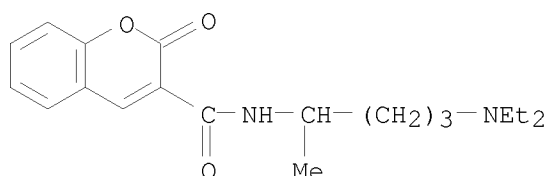
AB These compds. were prepared for testing for local anesthetic activity (report later). 3-Bromo-5-nitrosalicylaldehyde, m. 149-50° (all m.ps. corrected) (oxime, pale yellow, m. 222.1-3°). The Knoevenagel procedure [Ber. 31, 2585(1898)] was used to prepare the intermediate 3-coumarincarboxylic acids; in some cases, it was necessary to heat the reaction mixture and to use a larger quantity of catalyst. 2,3,5-HO(MeO)(O<sub>2</sub>N)C<sub>6</sub>H<sub>2</sub>CHO (25 g.), 25 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub>, 30 ml. absolute EtOH, and 2 ml. piperidine, refluxed 6 hrs. and diluted with 400 ml. EtOH, give 85% Et 8-methoxy-6-nitro-3-coumarincarboxylate. Et 8-methoxy-3-coumarincarboxylate (24.8 g.), added slowly to 100 ml. HNO<sub>3</sub> (d. 1.42) at 25° and heated 1 hr. at 40-5°, gives 22% of the 5-NO<sub>2</sub> derivative, pale yellow, m. 184-6°. The free acids were prepared by refluxing the Et esters with an excess of dilute NaOH several hrs. and pouring the Na salt into strong hot HCl. The acid and SOCl<sub>2</sub>, refluxed 2 hrs., give the acid chloride. The following derivs. were prepared in high yields from the acid chloride and the basic alc. in C<sub>6</sub>H<sub>6</sub>, or from the acid and an ω-dialkylaminoalkyl halide in iso-PrOH; a 3rd method consisted of the transesterification of the Et ester with a basic ester. A further method was the direct synthesis from suitable malonic esters. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> (160 g.), 250 g. Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OH, and 400 ml. PhMe, distilled slowly (8 hrs.), give 95.2 g. CH<sub>2</sub>(CO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NEt<sub>2</sub>)<sub>2</sub>, b<sub>0.2-0.5</sub> 91-102°; 30.2 g. of the ester and 12.2 g. o-HOC<sub>6</sub>H<sub>4</sub>CHO, heated 3 hrs. at 100° with 10 drops piperidine, give an excellent yield of 2-diethylaminoethyl 3-coumarincarboxylate, m. 211-12°. The following new 3-coumarincarboxylates were prepared: Y, Z, R, M.p., °C., Yield, %; H, H, OCHMe(CH<sub>2</sub>)<sub>3</sub>NEt<sub>2</sub>.HCl, 125-6, 76; H, H, SCH<sub>2</sub>CH<sub>2</sub>NEt<sub>2</sub>.HCl, 189-91, 77; H, H, O(CH<sub>2</sub>)<sub>2</sub>S(CH<sub>2</sub>)<sub>3</sub>NC<sub>5</sub>H<sub>10</sub>.HCl, 118-19, 69; H, H, NHCHMe(CH<sub>2</sub>)<sub>3</sub>NEt<sub>2</sub>.HCl, 141-4, 70; NO<sub>2</sub>, OMe, OEt, 210-10.5, 85; NO<sub>2</sub>, OMe, OH, 219-20, 99; NO<sub>2</sub>, OMe, Cl, 179-80, 85; NO<sub>2</sub>, OMe, O(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>.HCl, 191-2, 90; NO<sub>2</sub>, OMe, NEt<sub>2</sub>, 192-3, 93; H, OMe, Cl, 171-2, 99; H, OMe, O(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>.HCl, 195-6, 75; H, OMe, NEt<sub>2</sub>, 107-8, 51; H, NO<sub>2</sub>, OEt, 160-1, 40; H, NO<sub>2</sub>, OH, 191-2, 90; NO<sub>2</sub>, H, O(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>.HCl, 197-8, 90; NO<sub>2</sub>, H, NEt<sub>2</sub>, 184-5, 72; NO<sub>2</sub>, Br, OEt, 184-5, 10; NO<sub>2</sub>, Br, OH, 221-2, 40; Br, H, OEt, 168-9, 88; Br, H, Cl, 160-1, 94; Br, H, O(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>.HCl, 193-4, 89; Br, H, NEt<sub>2</sub>, 160-1, 71; Br, H, NHCHMe(CH<sub>2</sub>)<sub>3</sub>NEt<sub>2</sub>.HCl, 170-2, 75; Br, H, O(CH<sub>2</sub>)<sub>2</sub>S(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>.HCl, 166-7, 75; Br, H, S(CH<sub>2</sub>)<sub>4</sub>NEt<sub>2</sub>.HCl, 209-10, 80; Br, H, S(CH<sub>2</sub>)<sub>2</sub>NEt<sub>2</sub>.HCl, 210-12, 37; Br, H, SCHMe(CH<sub>2</sub>)<sub>3</sub>NEt<sub>2</sub>.HCl, 111-13, 65; 7-Hydroxy-4-coumarincarboxylic acid (5 g.), 3 g. Et<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>Cl, and 50 ml. iso-PrOH, refluxed 1 hr., give 7 g. of the 2-diethylaminoethyl ester (HCl salt), yellow, m. 192.7-3.9°; 2-(1-piperidyl)ethyl ester (HCl salt), yellow, m. 213.4-15°; 3-(4-morpholinyl)propyl ester (HCl salt), pale yellow, m. 233-3.8°; the reaction fails with Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>Cl. Et 6-nitro-3-coumarincarboxylate (3 g.) in 100 ml. AcOEt, reduced (12-48 hrs.

at 50°) over 5 g. neutral Raney Ni at 2.5-3 atmospheric, gives 90% Et 6-amino-3,4-dihydro-3-coumarincarboxylate, m. 90-1° (decomposition) [HCl salt, m. 185-90° (decomposition)]; during the latter stages of the reduction, there is formed an orange precipitate, m. 161-3°, which results also on the reduction by West's method (C.A. 19, 1411); 8-MeO derivative, m. 81-2°, 93% (HCl salt, m. 185-90°); an intermediate insol. red-orange precipitate, m. 149-50° (which results also on reduction by West's method), is formed. Et 5-amino-8-methoxy-3,4-dihydro-3-coumarincarboxylate, m. 126-8°, 92% (HCl salt, m. 185-6°). The reduction of 2-diethylaminoethyl 8-methoxy-6-nitro-3-coumarincarboxylate-HCl gives a compound m. 134-5°. N,N-Diethyl-6-nitro-3-coumarincarboxamide yields a bright yellow, insol. solid, m. 110-15°.

IT 854903-61-0, Coumarin, 3-[(4-diethylamino-1-methylbutyl)carbamoyl]-(derivs.)

RN 854903-61-0 CAPLUS

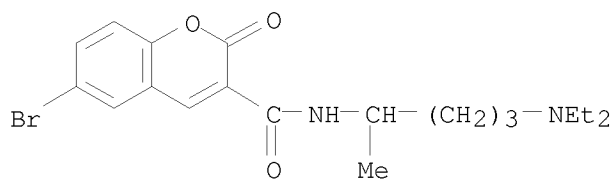
CN 2H-1-Benzopyran-3-carboxamide, N-[4-(diethylamino)-1-methylbutyl]-2-oxo-(CA INDEX NAME)



IT 856179-07-2P, Coumarin, 6-bromo-3-[(4-diethylamino-1-methylbutyl)carbamoyl]-, hydrochloride  
RL: PREP (Preparation)  
(preparation of)

RN 856179-07-2 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-bromo-N-[4-(diethylamino)-1-methylbutyl]-2-oxo-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)



L9 ANSWER 374 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1947:29770 CAPLUS

DOCUMENT NUMBER: 41:29770

ORIGINAL REFERENCE NO.: 41:5976e-i, 5977a-i, 5978a-d

TITLE: Studies in chemotherapy. I

AUTHOR(S): Buu-Hoi; Royer, Rene; Jouin, J. J.; Lecocq, J.; Guettier, D.

SOURCE: Bulletin de la Societe Chimique de France (1947) 128-36

CODEN: BSCFAS; ISSN: 0037-8968

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 41:29770

AB Investigated for their inhibitory effect on tuberculosis bacillus (I) and hemolytic streptococcus (II) and for their general toxicity were various derivs. of dihydrochaulmoogryl alc. (III), PhNHNH<sub>2</sub> (IV), homophthalimide, 2,5-dimethylpyrrole, coumarin, indophenazine, sulfanilamide, p-toluenesulfonamide, and β-naphthalenesulfonamide. Also the inhibitory action toward I and pneumococcus of the following are given: PhSEt, p-RC<sub>6</sub>H<sub>4</sub>C(:NH)NH<sub>2</sub> (R:H, NO<sub>2</sub>, NH<sub>2</sub>, MeS, EtS, PrS), and 2,2'-dihydroxy-5,5'-dichlorobenzil. To 6 g. IV in 25 mL. dry xylene was added 3 g. NaNH<sub>2</sub>. Oleyl bromide (15 g.) was added, the mixture refluxed 3 h., decanted and dried over K. Distillation gave 5 g. of PhN(NH<sub>2</sub>)C<sub>18</sub>H<sub>35</sub>, viscous, pale-yellow oil, b<sub>18</sub> 310-5°, b<sub>2.5</sub> 265-70°, very soluble in lipides, much less toxic than IV. Similarly α-chloromethylnaphthalene gave PhN(NH<sub>2</sub>)CH<sub>2</sub>C<sub>10</sub>H<sub>7</sub>-α, very viscous, pale-yellow oil, b<sub>2</sub> 225-8° (considerable higher-boiling material also was produced, possibly a disubstituted product), gave a crystalline acetylhydrazide with Ac<sub>2</sub>O, much less toxic than IV. Tests on tuberculosis in guinea pigs gave no interesting results. Similarly (reaction more difficult) 1-chloromethyl-4-methylnaphthalene gave PhN(NH<sub>2</sub>)CH<sub>2</sub>C<sub>11</sub>H<sub>9</sub>, very viscous, yellow oil, b<sub>3</sub> about 250°. To 40 g. III in 250 mL. dry C<sub>6</sub>H<sub>6</sub> was added 35 g. p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COCl, and the mixture was heated 3 h. after the first vigorous reaction. The mixture was washed and the C<sub>6</sub>H<sub>6</sub> driven off, leaving a colorless, greasy product, dihydrochaulmoogryl p-nitrobenzoate, decompose on distillation in a high vacuum, strongly inhibitory to I in vitro but inactive in guinea pigs. The p-hydroxybenzoate and p-aminobenzoate of III were prepared and are being tested in vivo. Homophthalic anhydride (2 g.) and 2 g. 2-undecylamine (V) (from the reduction of Me nonyl ketone oxime) were distilled together to give N-2-undecylhomophthalimide, viscous, amber-yellow oil, b<sub>15</sub> 237-8°, soluble in alkali with a yellow fluorescence (due to enol form), inactive toward II in mice. AcCH<sub>2</sub>CH<sub>2</sub>Ac (VI) and V were condensed by the method of Knorr and Paal to give N-2'-undecyl-2, 5-dimethylpyrrole, b<sub>13</sub> 178-9°. p-tert-Butylaniline and VI gave N-(p-tert-butylphenyl)-2, 5-dimethylpyrrole, b<sub>12</sub> 167°, m. 83-4°, colorless needles from alc. p-CH<sub>3</sub>SC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> and VI gave N-p-methylmercaptophenyl-2, 5-dimethylpyrrole, m. 60-1° (from alc.), pale rose. VI and m-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NMe<sub>2</sub> gave N-m-dimethylaminophenyl-2, 5-dimethylpyrrole, b<sub>11</sub> 174-5°, m. 37°, colorless needles from aqueous alc. VI and 4-methyl-1-naphthylamine gave N-(4'-methyl-1'-naphthyl)-2, 5-dimethylpyrrole, m. 154°, colorless plates from alc. 1, 5-Naphthalenediamine and VI gave 1, 5-bis (2', 5'-dimethyl-1'-pyrryl)-naphthalene, colorless needles from AmOH, m. 288-9° (rapid heating), sublimes easily on heating. N-o-Chlorophenyl-2, 5-dimethylpyrrole, b<sub>15</sub> 150°, slight

terpene-like odor. Sulfanilamidothiazole and VI gave N-(2, 5-dimethylpyrryl)-p-phenylsulfamidothiazole, decompose 300° without melting. 3, 2-CH<sub>2</sub>:CHCH<sub>2</sub>(HO)C<sub>6</sub>H<sub>3</sub>CHO, b<sub>11</sub> 111° (from Claisen rearrangement of o-CH<sub>2</sub>:CHCH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CHO) was condensed with CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> (VII) in piperidine to give Et 8-allylcoumarin-3-carboxylate (VIII), colorless needles from alc., m. 86°; LD for a mouse was about 0.20 g. Hydrolysis of VIII gave 8-allylcoumarin-3-carboxylic acid, colorless needles from alc., m. 145-6°. Similarly, 5, 2-Cl(OH)C<sub>6</sub>H<sub>3</sub>CHO (IX) and VII gave Et 6-chlorocoumarin-3-carboxylate (X), colorless needles from alc., m. 159°, pale yellow in H<sub>2</sub>SO<sub>4</sub>; LD for a mouse was 0.20 g. Hydrolysis of X gave 6-chlorocoumarin-3-carboxylic acid (XI), colorless prismatic needles from alc., m. 193°; Na salt slightly soluble in H<sub>2</sub>O, separating as pearly plates. XI was converted to the acid chloride (colorless solid) by SOCl<sub>2</sub> and thence to the amide, m. 207-9° (from alc.). AcCH<sub>2</sub>CO<sub>2</sub>Et and IX in piperidine gave 3-acetyl-6-chlorocoumarin, slightly soluble in alc., colorless needles from alc. + C<sub>6</sub>H<sub>6</sub>, m. 207° (rapid heating), sublimes easily at 190°, oxime m. 228° (decompose), o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COOH was converted to isatin-7-carboxylic acid (XII), m. about 235° (decompose), by the method of Sandmeyer. XII and o-C<sub>6</sub>H<sub>4</sub>(NH<sub>2</sub>)<sub>2</sub> (XIII) in HOAc gave indophenazine-7-carboxylic acid, yellow prisms from pyridine, m. 315°, yellow-brown in H<sub>2</sub>SO<sub>4</sub>. Isatin-6-carboxylic acid (XIV) (from m-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COOH) and XIII gave indophenazine-8-carboxylic acid, crystalline from PhNO<sub>2</sub>, m. about 340° (decompose), easily soluble in aqueous

NaOH

(red color). Isatin-5-carboxylic acid (from p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COOH) and XIII gave indophenazine-9-carboxylic acid, solid at 380°, yellow-brown in H<sub>2</sub>SO<sub>4</sub>. 1, 2-Naphthalenediamine and XIV gave 1, 2-(or 3, 4)-benzindophenazine-8-carboxylic acid, m. 340° (decompose), deep-red in H<sub>2</sub>SO<sub>4</sub>, yellow Na salt. 2-Aminofluorene and p-AcNHC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>Cl (XV) in pyridine gave N-acetylsulfanilamido-2-fluorene (XVI), needles from alc. +C<sub>6</sub>H<sub>6</sub>, m. 258-9°, inactive toward I or II. Prolonged heating of XVI with a large excess of concentrated HCl gave 2-sulfanilamidofluorene, needles from HOAc, m. 229-30°. Similarly 5-aminoacenaphthene and XV gave N-acetylsulfanilamido-5-acenaphthene, plates from C<sub>6</sub>H<sub>6</sub>, m. 270°, slightly soluble in alc., dark coloration in H<sub>2</sub>SO<sub>4</sub> which rapidly turned darker. p-CH<sub>3</sub>SC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> and XV gave N-acetylsulfanilamido-4-methylmercaptobenzene (XVII), needles from alc., m. 170°, blue in H<sub>2</sub>SO<sub>4</sub>. Boiling of XVII with large excess of concentrated HCl gave sulfanilamido-4-methylmercaptobenzene, needles from alc., m. 192.5°, deep-blue in H<sub>2</sub>SO<sub>4</sub>, active toward II. 4, 4'-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> and XV gave 4(N-acetylsulfanilamido)-4'-nitrodiphenyl sulfide, plates from alc. +C<sub>6</sub>H<sub>6</sub>, m. 221°, easily soluble in alkaline (red color). 2-Sulfanilamido-4-methylthiazole and XV gave N<sub>4</sub>-(N-acetylsulfanilyl)sulfanilamido-N<sub>1</sub>-methylthiazole, needles from HOAc, m. 270-1°. 4-Amino-4'-nitrodiphenyl sulfoxide and XV gave 4-(N-acetylsulfanilamido)-4'-nitrodiphenyl sulfoxide, crystalline from HOAc, m. 262° (decompose); resists deacetylation by hot HCl. o-Anisidine and XV gave N-acetylsulfanilamido-2-methoxybenzene, plates from alc. +C<sub>6</sub>H<sub>6</sub>, m. 204° inactive toward II. m-PhCH<sub>2</sub>NHC<sub>6</sub>H<sub>4</sub>Cl and XV gave N<sub>4</sub>-acetyl-N<sub>1</sub>-benzyl-N<sub>1</sub>-(3-chlorophenyl)sulfanilamide, colorless needles from alc., m. 166°. Benzidine and XV gave 4, 4'-bis(N-acetylsulfanilyl)benzidine, needles from HOAc, m. 274°. p-C<sub>6</sub>H<sub>4</sub>(NH<sub>2</sub>)<sub>2</sub> and XV gave p-bis(N-acetylsulfanilamido) benzene (XVIII), colorless needles from HOAc, m. about 305° (decompose). Product of deacetylation of XVIII, needles from HOAc. The following prepared from p-CH<sub>3</sub>C<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>Cl and the appropriate amine: 2-tosylaminofluorene, needles from toluene, m. 155-6°; 5-tosylaminoacenaphthene, plates from

HOAc, m. 193°; N4-tosylsulfanilamide, needles from HOAc, m. 186°; N-ethyl-N-tosyl- $\beta$ -naphthylamine, plates from alc., m. 128°; N-ethyl-N-tosyl-m-chloroaniline, needles from alc., m. 72°; N-tosyl-o-anisidine, plates from alc., m. 126°; N-tosyl-N-benzyl-m-chloroaniline, needles from alc., m. 107°; N-tosyl-o-chloroaniline, leaflets from alc., m. 102°; 4-tosylamino-4'-nitrodiphenylsulfoxide, m. 211° (from HOAc), pale-yellow, green in H<sub>2</sub>SO<sub>4</sub> turning rapidly to brown. The following prepared from  $\beta$ -naphthylsulfonyl chloride and the appropriate amine: N( $\beta$ -naphthylsulfonyl)-o-anisidine, needles from alc. +C<sub>6</sub>H<sub>6</sub>, m. 158°; N4-( $\beta$ -naphthylsulfonyl)sulfanilamido-N1-2, 4-dimethylpyrimidine, m. 253.5° (from C<sub>6</sub>H<sub>6</sub>); N-( $\beta$ -naphthylsulfonyl)-N-benzyl-m-chloroaniline, fine prismatic needles from alc. +C<sub>6</sub>H<sub>6</sub>, m. 132°; 2-( $\beta$ -naphthylsulfonylamino)fluorene, needles from alc. +C<sub>6</sub>H<sub>6</sub>, m. 162°; N4-( $\beta$ -naphthylsulfonyl)sulfanilamide, m 250° (from C<sub>6</sub>H<sub>6</sub>); N-( $\beta$ -naphthylsulfonyl)-p-nitraniline, yellow prisms from alc. +C<sub>6</sub>H<sub>6</sub>, m. 171-2°; N-( $\beta$ -naphthylsulfonyl)-o-chloroaniline, prisms from alc., m. 115°; N-( $\beta$ -naphthylsulfonyl)-N-ethyl-o-chloroaniline, failed to crystalline; N-( $\beta$ -naphthylsulfonyl)-N-ethyl- $\beta$ -naphthylamine, needles from C<sub>6</sub>H<sub>6</sub>, m. 187°.

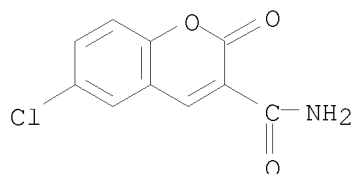
IT 38472-57-0P, Coumarin, 3-carbamoyl-6-chloro-

RL: PREP (Preparation)

(preparation of)

RN 38472-57-0 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 6-chloro-2-oxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L9 ANSWER 375 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1942:31114 CAPLUS

DOCUMENT NUMBER: 36:31114

ORIGINAL REFERENCE NO.: 36:4824g-i, 4825a-h

TITLE: Isoquinoline series. V.  
1-(4-Coumarinylmethyl)-, 1-(3-coumarinylmethyl)-, and  
1-(3-coumarinyl)isoquinolines

AUTHOR(S): Dey, B. B.; Sankaran, K.

SOURCE: Proceedings of the National Institute of Sciences of  
India (1940), 6, 173-94  
CODEN: PNISBD; ISSN: 0370-0860

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C. A. 36, 4510.6.-Homopiperonylamine (3.3 g.), 4.9 g. of the Et ester of 7-methylcoumarin-4-acetic acid (I) and 30 cc. toluene were boiled for 3-4 hrs., cooled and the precipitate worked up to give 4.5 g. 7-methyl-N-[2-(3,4-methylenedioxyphenyl)ethyl] coumarin-4-acetamide (II), m. 197°. II (2 g.) in 20 cc. MePh was refluxed on a sand bath for 1.5 hrs. with 12 cc. POCl<sub>3</sub>, and the cooled solution poured onto cracked ice and filtered. The filtrate was extracted with CHCl<sub>3</sub>, the extract dried, the solvent removed and the product crystallized from benzene, yielding 0.5 g. 1-(7-methyl-4-coumarinylmethyl)-6,7-methylenedioxy-3,4-dihydroisoquinoline (III), m. 184°. The solid material from the filtration was crystallized from hot water, yielding 0.9 g. of III.HCl, m. 265° (decomposition); HBr salt, m. 268° (decomposition); methiodide, m. 228° (decomposition); nitrate, m. 156°; picrate, m. 248° (decomposition). III (1 g.), 3 g. Zn dust, 0.5 g. CuSO<sub>4</sub>, and 30 cc. water were warmed and to the mixture was added 2.5 cc. H<sub>2</sub>SO<sub>4</sub> during 1 hr. Filtration, addition of Na<sub>2</sub>CO<sub>3</sub> and extraction with CHCl<sub>3</sub> gave 0.3 g. 1-(7-methyl-4-coumarinylmethyl)-6,7-methylenedioxy-1,2,3,4-tetrahydroisoquinoline as an oil; HCl salt, m. 175° (decomposition); picrate, m. 207° (decomposition); Ac derivative, m. 204° (decomposition). I. (1.8 g.) and 2.45 g. homoveratrylamine were refluxed in xylene for 3 hrs., yielding, on cooling, 2.6 g. N-[2-(3,4-dimethoxyphenyl)ethyl]-7-methylcoumarin-4-acetamide (IV), m. 174°. IV (2 g.), 16 cc. PhMe and 11 cc. POCl<sub>3</sub> were refluxed 1.5 hrs., poured into ice water and the solution filtered. The PhMe layer was separated from the filtrate and extracted with CHCl<sub>3</sub>, the extract dried, the solvent removed and the solid so obtained crystallized from PhMe and pert. ether, yielding 0.5 g. 1-(7-ethyl-4-coumarinylmethyl)-6,7-dimethoxy-3,4-dihydroisoquinoline (V), m. 181°. The solid material from the filtration was V.HCl, m. 108° (yield 0.6 g.); HBr salt, m. 207° (decomposition); methiodide, m. 182° (decomposition). V (2 g. of the HCl salt) was treated with Zn dust, CuSO<sub>4</sub> and H<sub>2</sub>SO<sub>4</sub> as III had been, yielding 0.5 g. 1-(7-methyl-4-coumarinylmethyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline, as an oil; HCl salt, m. 98°; picrate, m. 165°; 3-coumarincarboxylic ester (4.36 g.), 3.3 g. homopiperonylamine and 30 cc. toluene were boiled 3-4 hrs. and the separated solid purified, yielding 4.8 g. N-[2-(3,4-methylenedioxyphenyl)ethyl]coumarin-3carboxamide (VI), m. 214°. Treatment of VI (2 g.) with POCl<sub>3</sub> gave 1.4 g. 1-(3-coumarinyl)-6,7-methylenedioxy-3,4-dihydroisoquinoline (VII), m. 253°; HCl salt, m. 221° (decomposition); HBr salt, m. 214° (decomposition); methiodide, m. 218° (decomposition); picrate, m. 213° (decomposition). Treatment of 2.5 g. VII with H<sub>2</sub>SO<sub>4</sub>, CuSO<sub>4</sub> and Zn gave 0.9 g. of 1-(3-coumarinyl)-6,7-methylenedioxy-1,2,3,4-tetrahydroisoquinoline, as an oil; HCl salt, m. 196-205°. Coumarin-3-carboxylic ester (4.36

g.) and 3.62 g. homoveratrylamine were boiled in PhMe, yielding 4 g. N-[2-(3,4-dimethylphenyl)ethyl]coumarin-3-carboxamide (VIII), m. 158°. VIII (3 g.), when refluxed with 22 cc. POCl<sub>3</sub> on a sand bath for 2 hrs. in PhMe gave 1.8 g. 1-(3-coumarinyl)-6,7-dimethoxy-3,4-dihydroisoquinoline (IX), m. 194°; HCl salt, m. 204° (decomposition); HBr salt, m. 212° (decomposition); picrate, m. 238° (decomposition); methiodide, m. 204° (decomposition). IX (1 g.) when treated with 3 g. Zn dust, 20 cc. H<sub>2</sub>O and 3 cc. H<sub>2</sub>SO<sub>4</sub> gave 1-(3-coumarinyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline, m. 187°; HCl salt, m. 248°; picrate, m. 228° (decomposition). Salicylaldehyde (6 g.), 11 g. Na succinate and 14 g. succinic anhydride were heated at 170-80° for 4 hrs.; the mixture was treated with NaHCO<sub>3</sub> solution and filtered. Acidification of the filtrate gave 1.8 g. coumarin-3-acetic acid, m. 158°. Et coumarin-3-acetate (4.72 g.) and 4 g. of homopiperonylamine were heated at 160-70° for 3 hrs., yielding, on purification, 3 g. N-[2-(3,4-methylenedioxyphenyl)ethyl]coumarin-3-acetamide (X), m. 202°. X (3 g.) was refluxed with POCl<sub>3</sub> and PhMe to yield 1-(3-coumarinylmethyl)-6,7-methylenedioxy-3,4-dihydroisoquinoline (XI), m. 175° (decomposition); HCl salt, m. 224°; methiodide, m. 225° (decomposition); picrate, m. 213°. XI (2 g.) was treated with Zn dust, CuSO<sub>4</sub>, water and H<sub>2</sub>SO<sub>4</sub> to yield 0.9 g. 1-(3-coumarinylmethyl)-6,7-methylenedioxy-1,2,3,4-tetrahydroisoquinoline, m. 110°; HCl salt, m. 245° (decomposition); picrate, m. 187° (decomposition). Et coumarin-3-acetate (2.36 g.) and 1.81 g. homoveratrylamine were refluxed at 160-70° for 4 hrs., yielding 2 g. N-[2-(3,4-dimethoxy-β-phenyl)ethyl]coumarin-3-acetamide (XII), m. 212°. XII (3 g.) on treatment with POCl<sub>3</sub> and PhMe gave 1-(3-coumarinylmethyl)-6,7-dimethoxy-3,4-dihydroisoquinoline (XIII), m. 222° (decomposition); HCl salt, m. above 360°; HBr salt, m. 240° (decomposition); picrate, m. 222° (decomposition). Treatment of XIII with Zn dust, CuSO<sub>4</sub>, H<sub>2</sub>O, and H<sub>2</sub>SO<sub>4</sub> gave 1-(3-coumarinylmethyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline as an oil; HCl salt, m. 236° (decomposition).

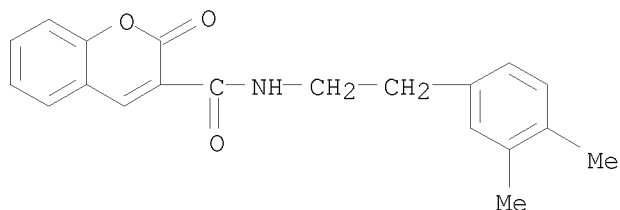
IT 1195214-63-1P

RL: SPN (Synthetic preparation); PRP (Properties); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(Isoquinoline series. V. 1-(4-Coumarinylmethyl)-, 1-(3-coumarinylmethyl)-, and 1-(3-coumarinyl)isoquinolines)

RN 1195214-63-1 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(3,4-dimethylphenyl)ethyl]-2-oxo- (CA INDEX NAME)

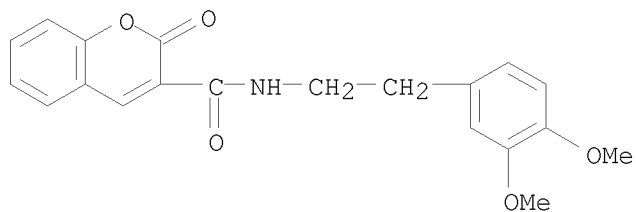


IT 217191-14-5P, 1,2-Benzopyran-3-carboxamide,  
N-(3,4-dimethoxyphenethyl)-2-oxo- 855757-24-3P,  
1,2-Benzopyran-3-carboxamide, N-homopiperonyl-2-oxo-  
RL: PREP (Preparation)  
(preparation of)

10/513699

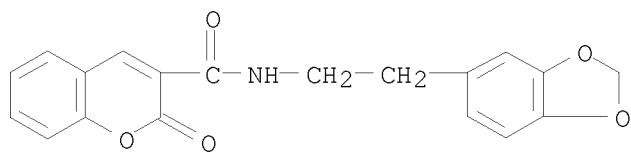
RN 217191-14-5 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(3,4-dimethoxyphenyl)ethyl]-2-oxo-  
(CA INDEX NAME)

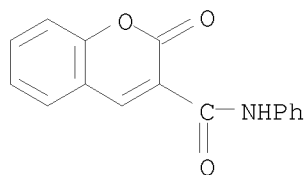


RN 855757-24-3 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-[2-(1,3-benzodioxol-5-yl)ethyl]-2-oxo-  
(CA INDEX NAME)



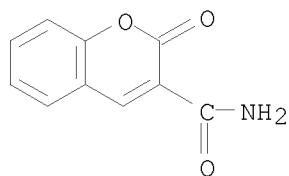
L9 ANSWER 376 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1941:30297 CAPLUS  
DOCUMENT NUMBER: 35:30297  
ORIGINAL REFERENCE NO.: 35:4740i,4741a-b  
TITLE: Condensation of malonanilic acid with aldehydes. II.  
With o-, m- and p-hydroxybenzaldehydes  
AUTHOR(S): Ittyerah, P. I.; Pandya, Kantilal C.  
SOURCE: Proceedings - Indian Academy of Sciences, Section A (1941), 13A, 119-21  
CODEN: PISAA7; ISSN: 0370-0089  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB cf. C. A. 32, 7435.4. PhNHCOCH<sub>2</sub>CO<sub>2</sub>H (I) (3.5 g.) and 2.4 g. of o-HOC<sub>6</sub>H<sub>4</sub>CHO, heated on the water bath for 3 h., give 1.6 g. (30%) of coumarin-3-carboxanilide, m. 247°. I and m-HOC<sub>6</sub>H<sub>4</sub>CHO, heated 5 h., give 52% of m-hydroxybenzylidenemalonanilic acid (II), m. 209°; it does not give a color with FeCl<sub>3</sub>. With p-HOC<sub>6</sub>H<sub>4</sub>CHO I gives 18% of the p-isomer of II, m. 239-40° (FeCl<sub>3</sub> gives a deep red color), and a small quantity of the anilide, m. 208°. I and BzH, heated 45 min. or 5 h., give 65 or 86% of benzylidenemalonanilic acid, m. 238°.  
IT 54396-25-7P, 1,2-Benzopyran-3-carboxanilide, 2-oxo-  
RL: PREP (Preparation)  
(preparation of)  
RN 54396-25-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



10/513699

L9 ANSWER 377 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1940:6955 CAPLUS  
DOCUMENT NUMBER: 34:6955  
ORIGINAL REFERENCE NO.: 34:1131h-i  
TITLE: N-Lower-dialkyl-coumarin-3-carboxamides  
INVENTOR(S): Dalmer, Otto; von Werder, Fritz  
PATENT ASSIGNEE(S): Merck & Co., Inc.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	US 2170127		19390822	US 1937-127914	19370226 <--
AB	Sedative compds. of but slight toxicity are produced by various reactions, preferably by treating coumarin-3-carbonyl chloride with a lower dialkylamine. Coumarin-3-carboxdimethylamide m. about 144-5°; the diethylamide m. about 77°; the methylethylamide m. about 108-9°; the methylpropylamide, etc., may be similarly formed.				
IT	1846-78-2, 1,2-Benzopyran-3-carboxamide, 2-oxo- (N,N-dialkyl derivs.)				
RN	1846-78-2 CAPLUS				
CN	2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)				

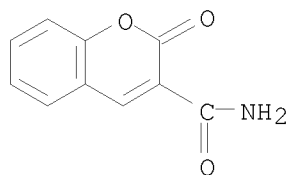




10/513699

L9 ANSWER 378 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1939:2204 CAPLUS  
DOCUMENT NUMBER: 33:2204  
ORIGINAL REFERENCE NO.: 33:321f-g  
TITLE: Alkyl esters of  $\beta$ -acetaminobutyric acid  
PATENT ASSIGNEE(S): F. Hoffmann La Roche & Co. A.-G.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE -----
	GB 488702		19380712	GB	<--
AB	Such esters in which the alkyl group contains not more than 3 C atoms are prepared by catalytic hydrogenation of esters of $\beta$ -acetaminocrotonic acid (I). The hydrogenation is effected at atmospheric or raised pressures and in the presence or absence of solvents. In examples, the Me, Et, Pr and iso-Pr esters of I are hydrogenated in the presence of Ni or Pd, MeOH and EtOH being used as solvents. The products are completely miscible with H <sub>2</sub> O and useful for preparing solns. of medicinal substances.				
IT	1846-78-2, 1,2-Benzopyran-3-carboxamide, 2-oxo- (N-alkyl derivs.)				
RN	1846-78-2 CAPLUS				
CN	2H-1-Benzopyran-3-carboxamide, 2-oxo- (CA INDEX NAME)				



L9 ANSWER 379 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1937:19588 CAPLUS

DOCUMENT NUMBER: 31:19588

ORIGINAL REFERENCE NO.: 31:2742i,2743a-i,2744a-c

TITLE: Derivatives of 3-coumarincarboxylic acid, a new class of synthetic medicinal

AUTHOR(S): v. Werder, F.

SOURCE: E. Merck's Jahresberichte (1936), 50, 88-101

CODEN: EMJBA8; ISSN: 0367-1011

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB In contrast to coumarin, its 3-carboxylic acid derivative (I), which is a sedative in small doses and acts as a hypnotic in large amts., has a sufficiently large therapeutic range of action to permit its use as a sedative but not as a hypnotic. The possibility of achieving a worth-while compound of this type has been investigated by the preparation and testing of over 100 derivs. A number of esters and alkyl-substituted acid amides were prepared together with salts with physiol. active bases. Compds. with simple or complex ring substituents were also synthesized and tested. A mixture of 12.2 g. o-HOC<sub>6</sub>H<sub>4</sub>CHO and 13.2 g. CH<sub>2</sub>(CO<sub>2</sub>Me)<sub>2</sub> was treated with 0.5 g. piperidine at room temperature After 24 hrs. the resulting solid mixture was worked up with MeOH and yielded 17.5 g. of methyl 3-coumarincarboxylate, m. 116.5°. Treatment of a suspension of 10 g. I in 100 g. Me<sub>2</sub>CHOH for 1.5 hrs. with a vigorous current of dry HCl, refluxing for 45 min. and neutralizing the cooled solution with 1.5 l. of 5% Na<sub>2</sub>CO<sub>3</sub> with continuous stirring, gave 9 g. of isopropyl 3-coumarincarboxylate, m. 89°. A mixture of 11.2 g. anhydrous Me<sub>2</sub>C(OH)CCl<sub>3</sub> (b. 167°), 12.6 g. 3-coumarincarbonyl chloride (II) and 7.6 g. quinoline was refluxed in 200 cc. toluene for 4 hrs. The cooled reaction mixture was filtered free from quinoline HCl salt, m. 86° and washed with 5% HCl which precipitated another compound m. 227-8°. The filtrate was diluted with Et<sub>2</sub>O, washed with 5% Na<sub>2</sub>CO<sub>3</sub> and H<sub>2</sub>O, dried and concentrated The residue gave, on recrystn. from alc. in

the

presence of charcoal, colorless crystals of trichlorotert-butyl 3-coumarincarboxylate, m. 176°. Similarly were prepared the Pr, Bu and PhCH<sub>2</sub> esters, m. 73, 67° and 92°, resp., and the HCl salt of the diethylaminoethyl ester, m. 215°. Several esters have the physiol. activity of the acid but do not surpass it in effectiveness. A solution of 20.8 g. II in 300 cc. C<sub>6</sub>H<sub>6</sub> was slowly introduced into 11.5 g. CH<sub>2</sub>:CHCH<sub>2</sub>NH<sub>2</sub> in 200 cc. anhydrous C<sub>6</sub>H<sub>6</sub>. The mixture was refluxed for 4 hrs., and evaporated The residue was crystallized from 50% alc. and yielded 20 g. of needles of N-allyl-3-coumarincarboxamide, m. 130°. Refluxing a mixture of 26.7 g. H<sub>2</sub>NCO<sub>2</sub>Et, 62.5 g. II, 45 cc. pyridine in 300 cc. C<sub>6</sub>H<sub>6</sub> for 2 hrs. produced 59 g. of crude material, m. 182° which crystallized from Me<sub>2</sub>CO in fine colorless needles of Et 3-coumarincarbonylcarbamate, C<sub>13</sub>H<sub>11</sub>NO<sub>5</sub>, m. 183-4°. The following monosubstituted acid amides were similarly prepared: Et, hexadecyl, phenethyl, PhCH<sub>2</sub>, p-anisyl, p-phenetyl, diethylaminoethyl (HCl salt), m. 132-3°, 108-10°, 178-9°, 154°, 215-16°, 206-7°, 187°, resp.; the s-diethylureide and diacetoneamide, m. 148-9° and 127-9° and Et α - methyl - α -phenyl - β - coumarin-3-carbonylaminopropionate, m. 111-12°. A suspension of 208.5 g. of finely powdered II in 1 l. Et<sub>2</sub>O was gradually stirred into a well cooled solution of 150 g. HNEt<sub>2</sub> in 900 cc. of anhydrous Et<sub>2</sub>O. After stirring for 18 hrs. at room temperature the mixture was filtered. The residue was extracted with Et<sub>2</sub>O and yielded 98 g. HNEt<sub>2</sub>.HCl. The Et<sub>2</sub>O

extract was added to the filtrate and the residue after evaporation was recrystd.

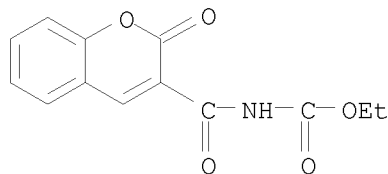
from 30% alc. producing 212 g. N,N-diethyl-3-coumarincarboxamide (III) m. 77-8°. The alkylation of the amido N atom causes an increased physiol. activity which is at its maximum with the lower alkyl disubstituted amides. III has the same limiting dosage as phanodorn but its lethal dosage is 5 times greater. In 0.2 g. doses, 1-2 times daily, it has a soothing effect in general nervousness and in a great number of neurasthenic and hysterical conditions. In 0.4 g. doses it acts as a hypnotic but is quite harmless. Further disubstituted amides have been prepared: Me<sub>2</sub>, Pr<sub>2</sub>, MePr, (CH<sub>2</sub>:CHCH<sub>2</sub>)<sub>2</sub>, iso-Bu<sub>2</sub>, sec-Bu<sub>2</sub>, Ph<sub>2</sub>, (β-phenylethyl)<sub>2</sub>, (PhCH<sub>2</sub>)<sub>2</sub>, iso-Bu allyl, iso-Am allyl and the piperidide, N-methyl-p-phenetide and N-benzyl-p-phenetide, m. 144-5°, 80-1°, 109-10°, 132°, 137°, 148°, 236°, 119-20°, 143°, 102-3°, 79° and 179-80°, 111-12° and 160°. Mixing of hot Me<sub>2</sub>CO solns. of 19 g. I and 16.5 g. dl-ephedrine and refluxing for 30 min. formed 29.7 g. of colorless ephedrine I salt (IV) m. 196°. The I salts of papaverine, l-ephedrine, l-p-aminophenyl-2-methylamino-1-propanol, quinine, sparteine, 1 - (3',4' - methylenedioxyphenyl) - 3 - methyl -6,7 -dioxymethyleneisoquinoline (V) and eupaverine, m. 129°, 145°, 182°, 137-9°, 157°, 174° and 134°, resp., were similarly prepared. The condensation of 10.1 g. of 3-allyl-2-hydroxybenzaldehyde with 10 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> by heating for 2.5 hrs. in the presence of 0.5 cc. piperidine produced 8 g. of prismatic crystals (from 80% alc.) of Et 8-allyl-3-coumarincarboxylate, m. 88° hydrolyzed by heating with 10% KOH and neutralization with 25% HCl to 8-allyl-3-coumarincarboxylic acid, m. 147°. Similarly the condensation of 2.5 g. CH<sub>2</sub>(CO<sub>2</sub>Et)<sub>2</sub> and 3.5 g. of 3-phenanthrol-4-aldehyde in the presence of 0.4 cc. piperidine gave a crude ester, m. 165° which was hydrolyzed to phenanthrocoumarincarboxylic acid, C<sub>13</sub>H<sub>10</sub>O<sub>4</sub>, m. 196°. Clinical tests of IV have shown that smaller doses of the H<sub>2</sub>O-soluble IV are as effectively antiasthmatically as the base or its HCl salt. IV is a constituent of the favorably-known antiasthmatic Epocan. The sedative nature of I is enhanced in the quinine salt which also loses much of the bitterness of the base. The spasmolytic effect of the isoquinolines is shown in V which has proved in clinical tests to have outstanding effect in the treatment of intestinal spasm in doses of 0.03 g. administered rectally or perorally without the constipating effect of opiates.

IT 1195264-11-9P

RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation)  
(Derivatives of 3-coumarincarboxylic acid, a new class of synthetic medicinal)

RN 1195264-11-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



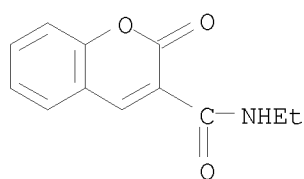
IT 1846-80-6P, 1,2-Benzopyran-3-carboxamide, N-ethyl-2-oxo-

10/513699

1846-90-8P, 1,2-Benzopyran-3-carboxamide, N-benzyl-2-oxo-  
1846-94-2P, 1,2-Benzopyran-3-carbox-p-aniside, 2-oxo-  
196091-79-9P, 1,2-Benzopyran-3-carboxamide, N-cetyl-2-oxo-  
307524-67-0P, 1,2-Benzopyran-3-carboxamide, 2-oxo-N-phenethyl-  
609797-11-7P, 1,2-Benzopyran-3-carboxamide, N-allyl-2-oxo-  
855286-96-3P, 1,2-Benzopyran-3-carboxamide,  
N-(2-diethylaminoethyl)-2-oxo-, -HCl 855287-08-0P,  
1,2-Benzopyran-3-carboxamide, N-(1,1-dimethyl-3-oxobutyl)-2-oxo-  
858785-82-7P, Hydratropic acid,  
 $\alpha$ -(2-oxo-3- $\alpha$ -benzopyranylcarbonylaminomethyl)-, ethyl ester  
RL: PREP (Preparation)  
(preparation of)

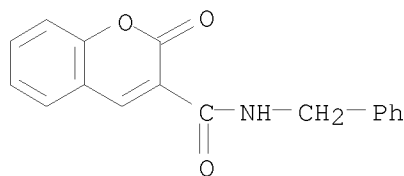
RN 1846-80-6 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-ethyl-2-oxo- (CA INDEX NAME)



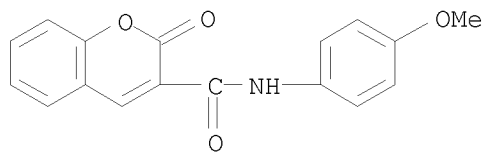
RN 1846-90-8 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(phenylmethyl)- (CA INDEX NAME)



RN 1846-94-2 CAPLUS

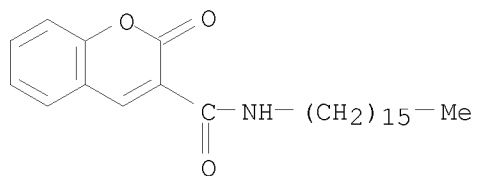
CN 2H-1-Benzopyran-3-carboxamide, N-(4-methoxyphenyl)-2-oxo- (CA INDEX NAME)



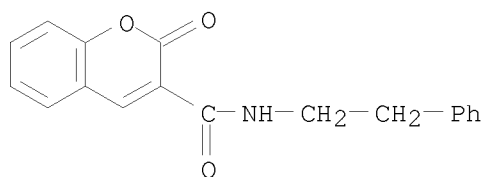
RN 196091-79-9 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-hexadecyl-2-oxo- (CA INDEX NAME)

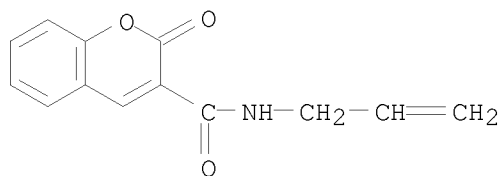
10/513699



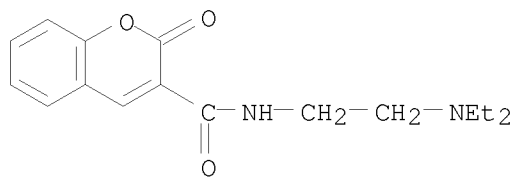
RN 307524-67-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-(2-phenylethyl)- (CA INDEX NAME)



RN 609797-11-7 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-2-propen-1-yl- (CA INDEX NAME)



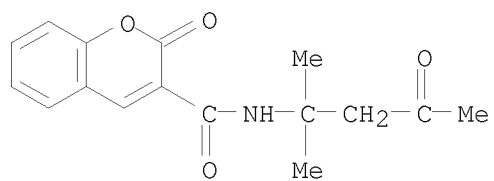
RN 855286-96-3 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(diethylamino)ethyl]-2-oxo-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

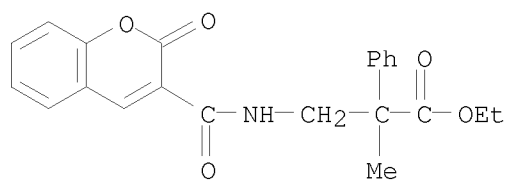
RN 855287-08-0 CAPLUS  
CN 2H-1-Benzopyran-3-carboxamide, N-(1,1-dimethyl-3-oxobutyl)-2-oxo- (CA INDEX NAME)

10/513699



RN 858785-82-7 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -methyl- $\alpha$ -[[[(2-oxo-2H-1-benzopyran-3-yl)carbonyl]amino]methyl]-, ethyl ester (CA INDEX NAME)



L9 ANSWER 380 OF 380 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1931:50327 CAPLUS

DOCUMENT NUMBER: 25:50327

ORIGINAL REFERENCE NO.: 25:5671d-g

TITLE: Condensation of aromatic aldehydes with malonanilic acid and its derivatives

AUTHOR(S): Ahluwalia, Gurcharan Singh; Haq, Muhammad Abdul; Ray, Jnanendra Nath

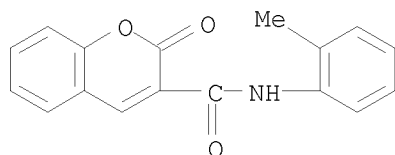
SOURCE: Journal of the Chemical Society (1931) 2059-62

CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

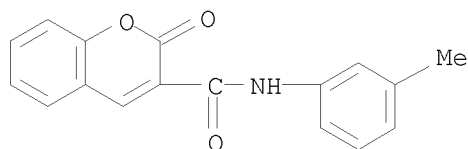
- AB PhNHCOCH<sub>2</sub>CO<sub>2</sub>H (1.8 g.) and piperonal (1.5 g.) in pyridine and a little piperidine, heated at 50-60° for 1 hr., give 1.3 g. of 3,4-methylene-dioxycinnamanilide (I), m. 158°, and 0.5 g. of piperonylidenemalonanilic acid, m. 202° (decomposition). I, on standing or on exposure to light, undergoes a change, possibly partial transformation into the geometrical isomer or an allo-form, which affects the m. p. Veratraldehyde gives a mixture of 3,4-dimethoxycinnamanilide, m. 111°, and 3,4-dimethoxybenzylidenemalonanilic acid, m. 222° (decomposition) (Ag salt). p-Methoxycinnamanilide, m. 140°. 3,4-Methylenedioxycinnam-o-toluidide, m. 181°; p-methoxybenzylidenemalonanilic acid, m. 213° (decomposition); piperonylidenemalon-o-toluidic acid, m. 213°; veratrylidene derivative, m. 219°; p-methoxybenzylidene derivative, m. 217°; p-methoxycinnam-o-toluidide, m. 177°. Reduction of Na piperonylidenemalonanilate with 2% Na-Hg at a low temperature gives α-homopiperonylmalonanilic acid, m. 172° (decomposition); veratryl derivative, m. 173°; α-homopiperonylmalon-o-toluidic acid, m. 163° (decomposition); veratryl derivative, m. 128°. These acids were treated with P<sub>2</sub>O<sub>5</sub> in C<sub>6</sub>H<sub>6</sub>, PhMe or C<sub>6</sub>H<sub>4</sub>Me<sub>2</sub>, with hot 80% H<sub>2</sub>SO<sub>4</sub>, ZnCl<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> in AcOH and with POCl<sub>3</sub> but no ring closure took place. PhNHCOCH<sub>2</sub>CO<sub>2</sub>H and o-HOC<sub>6</sub>H<sub>4</sub>CHO with pyridine give coumarin-3-carboxanilide, yellow, m. 247°; o-toluidide, m. 226°; m-toluidide, m. 200°. o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO gives a good yield of o-nitrobenzylidenemalonanilic acid (II), m. 172° (decomposition); o-toluidic acid, m. 221° (decomposition); o-nitropiperonylidenemalonanilic acid, m. 230°. II with Zn and boiling AcOH gives 2-anilinoquinoline and probably a ketonaphthioline.
- IT 1846-98-6P, 1,2-Benzopyran-3-carboxy-o-toluide, 2-keto-1846-99-7P, 1,2-Benzopyran-3-carboxy-m-toluide, 2-keto-54396-25-7P, 1,2-Benzopyran-3-carboxanilide, 2-keto-
- RL: PREP (Preparation)  
(preparation of)
- RN 1846-98-6 CAPLUS
- CN 2H-1-Benzopyran-3-carboxamide, N-(2-methylphenyl)-2-oxo- (CA INDEX NAME)



10/513699

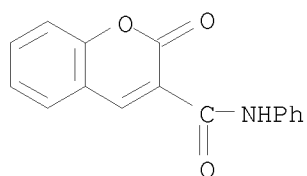
RN 1846-99-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, N-(3-methylphenyl)-2-oxo- (CA INDEX NAME)



RN 54396-25-7 CAPLUS

CN 2H-1-Benzopyran-3-carboxamide, 2-oxo-N-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)



10/513699

=> d his

(FILE 'HOME' ENTERED AT 13:19:08 ON 08 MAR 2010)

FILE 'REGISTRY' ENTERED AT 13:19:27 ON 08 MAR 2010

L1           STRUCTURE UPLOADED  
L2           50 S L1 SSS  
L3           11711 S L1 FULL

FILE 'CAPLUS' ENTERED AT 13:20:30 ON 08 MAR 2010

L4           678 S L3 FULL  
L5           4 S L4 AND COUMARIN-AMIDE  
L6           0 S L5 AND XIAO GUANG  
L7           4 S L5  
L8           678 S L4  
L9           380 S L8 AND PY<2003

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2253.08	2445.33
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-326.40	-326.40

STN INTERNATIONAL LOGOFF AT 13:33:04 ON 08 MAR 2010